City of Las Vegas

Lone Mountain

Master Plan

COMPREHENSIVE PLANNING

CITY OF LAS VEGAS PLANNING & DEVELOPMENT

Updated August 31, 2006

LONE MOUNTAIN
MASTER DEVELOPMENT PLAN
AND
DESIGN STANDARDS

APPROVED BY CITY COUNCIL
JUNE 23, 1997

Amended:
Z-33-97 (5), May 26, 1998
Z-33-97 (7), September 9, 1998
Z-33-97 (11), May 24, 1990
Z-33-97 (15), March 22, 2000
Z-33-97 (20), February 21, 2001
Z-33-97 (22), May 20, 2001
Z-33-97 (24), March 30, 2001
Z-33-97 (27), March 6, 2002
Z-33-97 (28), March 20, 2002
Z-33-97 (29), May 1, 2002
MOD-2476, August 6, 2003
MOD-2533, August 20, 2003
MOD-2813, October 1, 2003
MOD-2851, October 29, 2003
MOD-3758, April 7, 2004
MOD-4311, July 7, 2004
MOD-4632, October 20, 2004
MOD-5254, December 1, 2004
MOD-5854, March 16, 2005
MOD-5581, April 6, 2005
R-58-2006, August 2, 2006

LONE MOUNTAIN
MASTER DEVELOPMENT PLAN AND DESIGN STANDARDS

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1. INTRODUCTION

1.1 Lone Mountain Master Development Plan Concept

The Lone Mountain Master Development Plan shall reflect the objectives set forth in the Planned Development (PD) District which is a Special Purpose District as adopted by the City of Las Vegas, February 5, 1997.

1.1.1 The intent of the Planned Development (PD) District is to permit and encourage comprehensively planned developments whose purpose is redevelopment, economic development, cultural enrichment, or to provide a single-purpose or multi-use planned development. The reclassification of property to the PD District may be deemed appropriate if the development proposed for the District can accomplish the goals as stated in the Ordinance mentioned above. Pedestrian access to and from residential and commercial areas shall be an integral component of all site plans including connection with the Northwest pedestrian systems. Essential to creating this sense of place shall be a commitment to the following characteristics of development and design standards. A copy of the Lone Mountain Master Development and Design Standards document shall be maintained in the office of the City of Las Vegas Planning Department and shall be available for inspection during normal business hours.

1.2 Purpose

The purpose of the Lone Mountain Master Development Plan and Design Standards (or Lone Mountain Standards) is to guide the physical development of land within the boundaries of the Plan area by:

(a) prescribing the land uses,
(b) establishing a process of development , and
(c) providing the criteria for project approval.

1.2.1 The Lone Mountain Standards shall direct the actions of all entities, participating builders; developers and individual business owners and homeowners, including their respective sub-associations. The criteria contained in the document are binding on any person or entity which intends to construct, reconstruct or modify any permanent or temporary improvement within the Lone Mountain Master Development Plan area. The enforcement of the Standards will ensure the quality, visual continuity and consistency in design, and protect property values.

1.3 Project Location

The Lone Mountain Master Development Plan encompasses numerous parcels totaling 630 acres bounded by Craig Road to the north, Cheyenne Avenue to the south, Jensen to the east. The Beltway located nearly 2,640 feet west of Hualapai is the western boundary of the Master Plan area. A natural buffer between higher density and rural development is created by the presence of Lone Mountain which rises to height of

3,345 feet. See Figure 1 Lone Mountain Master Development Plan Vicinity Map. See legal description in Appendix D.

1.4 Relationship to Other Documents

1.4.1 Lone Mountain Master Development Plan and Design Standards is the primary document for use by all entities undertaking any improvements, participating builders, and individual business owners and homeowners, including their respective sub-associations. Other documents relating to the physical development of the property include the following:

- Comprehensive Plan and Master Development Plan: On December 18, 1996, an amendment to the General Plan was approved by the City Council. The amendment addresses conceptual master planning issues establishing the location, extent, and nature of proposed land uses, the provision of public facilities and services and basic infrastructure needs for the Lone Mountain Master Development Plan area.

- All development plans shall comply with the adopted Lone Mountain Standards as well as all other applicable regulations in the city, county, state, and federal jurisdictions. These Standards are not intended to override or contradict the City of Las Vegas codes or requirements. Where differences occur, the most stringent shall apply in all cases.

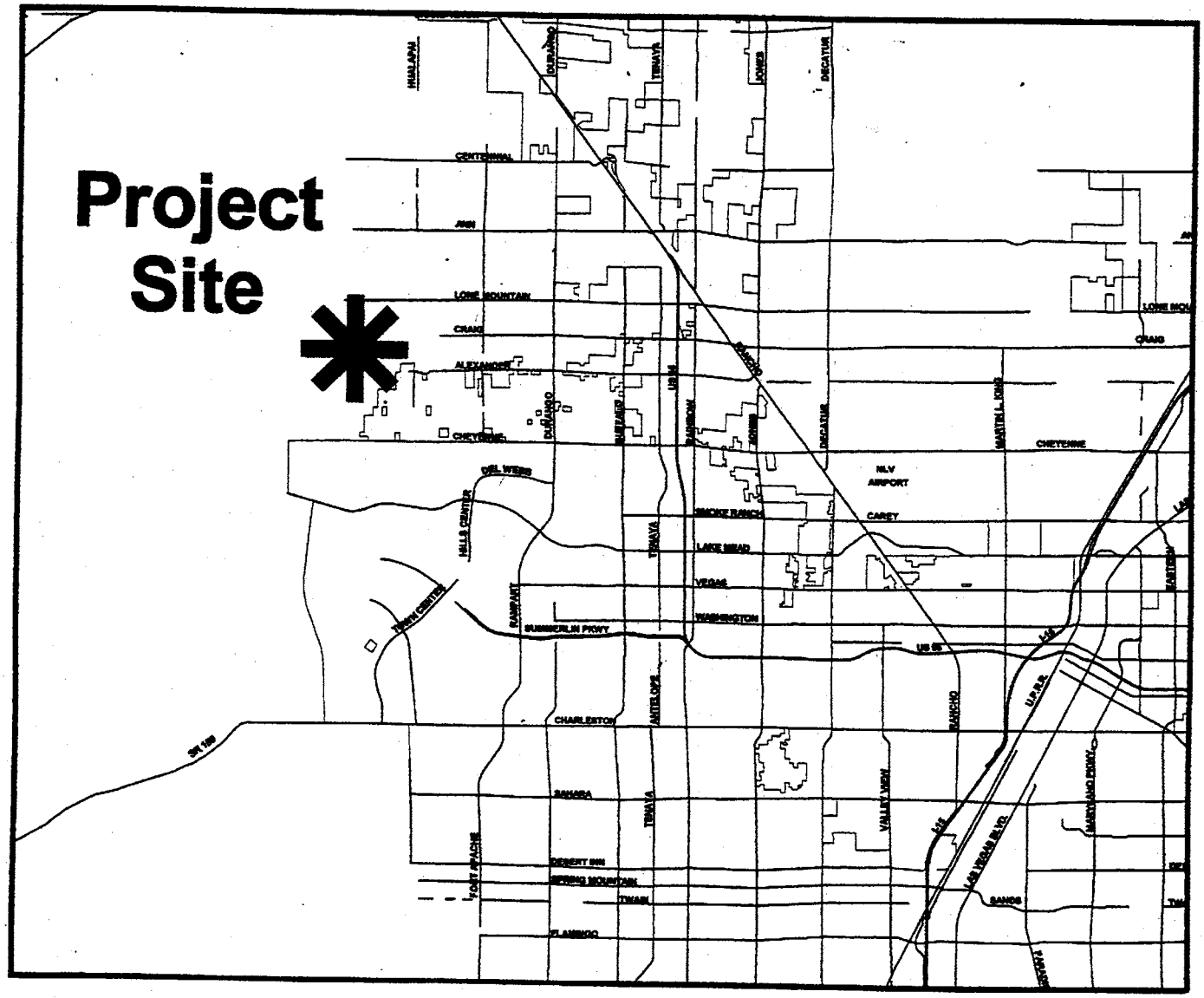
1.5 Amendment and Modification Procedures

The Lone Mountain Master Development Plan and Design Standards may be amended from time to time by ordinance or by resolution of the City Council.

1.5.1 Proposed amendments to the text, development standards or design standards shall be processed as in the case of a Title 19 text amendment.

1.5.2 Proposed modifications to land use designations on Figure 3 of the Plan shall be processed as in the case of Major Modification, utilizing the procedures for a general plan amendment under Title 19.

Figure 1 – LONE MOUNTAIN MASTER DEVELOPMENT PLAN VICINITY MAP



2. LAND USE

2.1 Purpose

The purpose of this section is to identify the land use categories and the uses permitted within each as defined by the City of Las Vegas Subdivision land Zoning Codes.

2.1.1 In general, the land use categories are those which are allowed under the Codes; additional uses are prohibited. Use permits and conditional use restrictions apply to some land uses; see the City Codes. At the discretion of the Planning Director, and if in compliance with appli cable CC&R's, other uses not specifically indicated herein may be approved if noted on the tentative map and approved by the City Council.

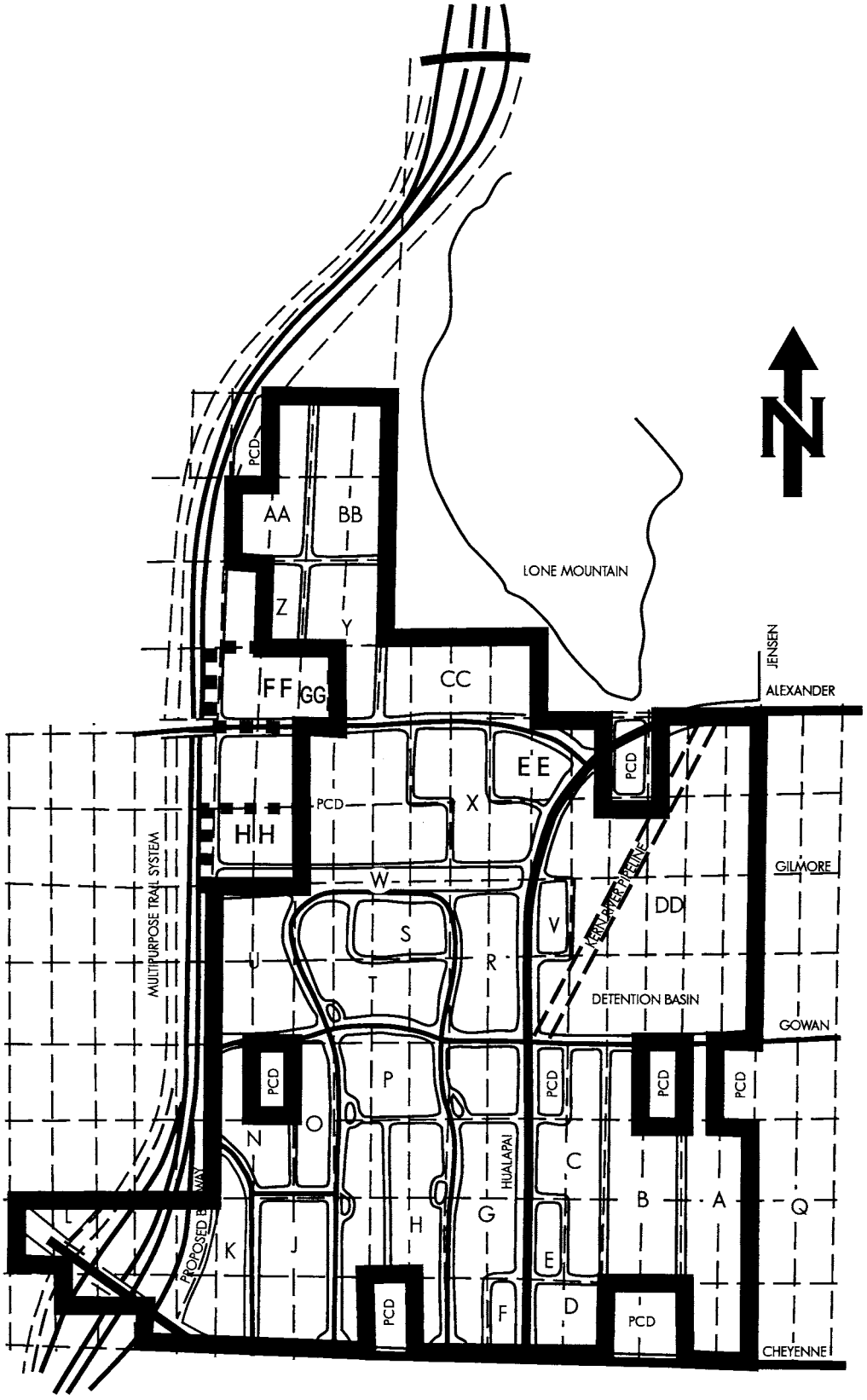
2.2 Development Parcels

Table 1 - DEVELOPMENT PARCELS

PARCEL	LAND USE	ACRE TOTAL	PCD ACRES	MAX DU/AC	PCD DU/AC	TOTAL UNITS
PCD	UNDETERMINED USE BY OTHERS	136.5				
A	PARK	36.8				
B	SCHOOL/CHURCH	26.3				
C	MEDIUM DENSITY	21.3	21.3	25	18	383
D	ASSISTED CARE	10.5	10.5			
E	LVVWD/FIRE STATION	5.5				
F	NEIGHBORHOOD COMMERCIAL	5.6	5.6			
G	LOW DENSITY	26.2	26.2	5.5	5	131
H	LOW DENSITY	21	21	5.5	5	105
I	MEDIUM LOW	21	21	8	7	147
J	MEDIUM LOW ATTACHED	21	21	12	10	210
K	VILLAGE COMMERCIAL .30 FAR	38.9	38.9			
L	VILLAGE COMMERCIAL .30 FAR	10.5		10.5		
M	VILLAGE COMMERCIAL .30 FAR	10.5	10.5			
N	MEDIUM DENSITY	12.6	12.6	18	18	227
O	MEDIUM LOW ATTACHED	10.5	10.5	12	10	105
P	MEDIUM LOW ATTACHED	15.75	15.75	12	10	158
Q	MEDIUM LOW ATTACHED	10.5	10.5	12	10	105
R	MEDIUM DENSITY	20	20	18	18	360
S	ELEMENTARY SCHOOL	12.7	12.7			
T	MEDIUM LOW ATTACHED	26.2	26.2	12	10	262
U	MEDIUM DENSITY	22	22	18	18	396
V	NEIGHBORHOOD COMMERCIAL	5.2	5.2			
W	GILMORE OPEN SPACE/ TRAILS	3	3			
X	MEDIUM DENSITY	21.5	21.5	18	18	387
Y	MEDIUM-LOW	17	17	8	6	102
Z	MEDIUM-LOW	6	6	8	6	36
AA	MEDIUM LOW	17	17	8	6	102
BB	MEDIUM LOW	22	22	8	6	132
CC	LONE MOUNTAIN PARK	21	21			
DD	GOWAN PARK/ DETENTION BASIN	105				
EE	MEDIUM DENSITY	20	20	25	18	349
FF	MEDIUM-LOW	10	10	8	6	66
GG	MEDIUM-LOW	5.49	5.49	8	6	34
HH	MEDIUM-LOW ATTACHED	10.58	10.58	12	10	190
	TOTALS	**800.57**	**491.07**			**3987**

LONE MOUNTAIN PLANNED COMMUNITY DEVELOPMENT

Figure 2 – DEVELOPMENT PARCELS



2.3 Land Use Designations

The Lone Mountain Master Development Plan area shall be comprised of eight land use designations which are listed below.

(1) Neighborhood Commercial
(2) Village Commercial
(3) Low Density (up to 5.5 du/ac)
(4) Medium-Low Density (5.6 to 8 du/ac)
(5) Medium-Low Attached Density (8.1 to 12 du/ac)
(6) Medium Density (12.1 to 18 du/ac)
(7) Public/Quasi-Public Facilities
(8) Open Space and Recreation

See Table 1- proposed land use development - parcel calculations.
See Table 2 - Proposed Land Use Designations - Summary for land use allocation.

2.3.1 Neighborhood Commercial

The Neighborhood Commercial category addresses parcels of 5 acres or less and provides for the development of convenience retail shopping, services and professional offices principally serving neighborhood needs, and compatible in scale, character and intensity with adjacent residential development.

2.3.2 Village Commercial

The Village Commercial land use designation addresses parcels not to exceed 20 acres with a Floor Area Ratio (FAR) not to exceed .30 or 30% gross coverage. Allows low to medium intensity retail, office or other commercial uses that serve primarily local area patrons, and do not include more intense general commercial characteristics. Village Commercial is typically located on the periphery of residential neighborhoods and should be confined to the intersections of major arterials and major freeways.

2.3.3 Low Density

The Low Density provides for the development of up to 5.5 dwelling units per gross acre. This density allows for detached, single-family product types including compact lots and zero lot line units, and two story buildings.

2.3.4 Single-Family Medium-Low Density

The Medium-Low Density provides for the development of 5.6 to 8 dwelling units per gross acre. This density allows for higher density detached, single-family product types including but not limited to compact lots and zero lot line, and two story buildings.

Table 2 - PROPOSED LAND USE DESIGNATIONS - SUMMARY

LAND USE				
PUBLIC FACILITIES / OPEN SPACE		**APPROX GROSS ACRES**	**ACRES IN PCD**	
SCHOOLS/CHURCH		39	12.7	
PARKS		144	39	
LAS VEGAS VALLEY WATER DISTRICT		5.5		
TOTAL GROSS ACRES PF/OS		188.5	51.7	
COMMERCIAL		**APPROX GROSS ACRES**		**SQUARE FEET**
NEIGHBORHOOD COMM		10.8	10.8	141,134
VILLAGE COMMERCIAL	.30 FAR MAX	59.9	59.9	782,773
ASSISTED CARE		10.5	10.5	137,214
TOTAL GROSS ACRES COMMERCIAL		81.2	81.2	1.061,121
RESIDENTIAL		**APPROX GROSS ACRES**		**TOTAL UNITS**
LOW	5 DU/AC	47.2	47.2	236
MEDIUM LOW	6 DU/AC	62	62	372
MEDIUM LOW	7 DU/AC	21	21	147
MEDIUM LOW ATTACHED	10 DU/AC	83.95	83.95	840
MULTI-FAMILY MEDIUM	20 DU/AC	97.4	97.4	1753
PCD		136.5		
TOTAL GROSS ACRES RESIDENTIAL		311.55	311.55	
TOTAL DWELLING UNITS				3348
TOTAL ACRES IN PCD			445	
GROSS RESIDENTIAL DENSITY				**7.52**

2.3.5 Medium-Low Attached Density

The Medium-Low Attached Density provides for the development of 8.1 to 12 dwelling units per gross acre. Product types shall include a variety of units such as plexes, townhouses, and low density multi-family, and detached one and two story residential buildings.

2.3.6 Medium Density

The Multi-Family Medium Density provides for the development of 12.1 to 18 dwelling units per gross acre. Product types shall include a higher density variety of multi-family unit such as condominiums and low density multi family, and buildings up to three stories.

2.3.7 Public Facilities

(a) **Public Schools**
A public school is currently planned within the Lone Mountain Master Development Plan area and shall be built according to Clark County School District standards. A letter from the CCSD will be sent to the City of Las Vegas.

(b) **Private Schools**
A private school is also currently planned within the PCD. The school is proposed to be a K-12 facility located on a 25 acre parcel.

(c) **Assisted Care Facility**
An assisted care facility is scheduled to be built on a 10 acre site at the northeast corner of Hualapai and Cheyenne. Others may be incorporated.

(d) **Fire Station**
The availability of BLM land makes the siting of the station easier. The Fire Station is to be located on the Las Vegas Valley Water District site, the north 2.5 acres.

(e) **Quasi Public**
Currently one church is expected to locate in the PCD. The possibility of another church or quasi-public facility locating in the PCD exists with the BLM property that is available.

2.3.8 Open Space and Recreation

Publicly dedicated open space will include neighborhood parks, community parks, and the Gowan Drainage and Open Space System. Upon installation of the landscaping the Developer will maintain the parks and/ or open space until such time that the park is deeded over to the city or to the homeowners association.

(a) Parks / Open Space

A series of parks and open space trail systems shall be linked with the pedestrian pathway system through coordination of individual developer site plans. Neighborhood parks shall be built within residential communities to provide passive and active play areas as required by the City of Las Vegas Zoning Ordinance at 330 square feet per dwelling unit. Table 3 shows where the open space requirements shall be incorporated and the units applied as built and sold.

Lone Mountain Park is assumed to be developed in a minimalist fashion. Therefore, it has not been applied at one-half (1/2) the normal rate

Table 3 PARK IMPACT FEE DEDICATIONS

PARK	ACRES	# UNITS APPLIED
POCKET PARKS	3	396
O.S./ TRAILS	4	423
GILMORE O.S.	10	1280
LONE MTN PARK	16	1052
TOTALS	33	3151

2.4 Permissible Uses

Buildings, structures and land shall be used only in accordance with the uses permitted in the following Land Use Schedule:

	Neighborhood Commercial	Village Commercial
Retail		
Antique/Collectible Store	P	P
Banquet Facility	X	P
Check Cashing Service, Limited	WC (See Title 19)	WC (See Title 19)
Copy Center	P	P
Drug Store	P	P
Electrical, Watch, Clock, Jewelry & similar repair	P	P
Garden Supply/Plant Nursery	P	P
Gasoline Retail Sales	P	P
General Retail Store, Other Than Listed, <3,500 sq. ft.	P	P
General Retail Store, Other Than Listed, >3,500 sq. ft.	X	P
Liquor Establishment (Off Premise Consumption)	X	SUP
Liquor Establishment (Tavern)	X	SUP
Night Club	X	SUP
Office Other Than Listed	P	P
Pet Shop	X	P
Rental Store w/o Outside Storage	P	P
Restaurant <2,000 sq. ft. w/o Drive-Through	P	P
Restaurant >2,000 sq. ft. w/o Drive-Through		P
Restaurant <2,000 sq. ft. w/ Drive-Through	P	P
Restaurant >2,000 sq. ft. w/ Drive-Through	X	P
Restaurant with Service Bar	P	P
Supper Club with alcohol	SUP	SUP
Mini Warehouses	P	P
Personal Service		
Astrologer, Hypnotist or Psychic Art and Science	X	P
Billiard Parlor or Pool Hall or Arcade	P	P
Business School	X	P
Car Wash	X	P
Catering Service	P	P
Child Care Center	P	P
Commercial Amusement/Recreation (Inside)	X	P
Country Club, Private	X	P
Custom & Craft Work	X	P
Custom Craftwork	P	P
Dry Cleaners	P	P
Golf Driving Range	P	P
Health Club	P	P
Private Club, Lodge or Fraternal Organization	X	P
Animal Hospitals, Clinic, Shelter or Boarding/Kennel Without Outside Pens	X	P

	Neighborhood Commercial	Village Commercial
Public/Education/Governmental Facilities		
Church/House of Worship	P	P
Church/House of Worship, store front	X	X
College, University or Seminary	X	P
Community Recreational Facility (Public)	P	P
Government Facility	P	P
Library, Art Gallery or Museum (Public)	P	P
Post Office, Local Service	P	P
Public Park or Playground	P	P
Museum or Art Gallery (Private)	P	P
Trade School	X	P
Public or Private School. Primary	P	P
Public or Private School, Secondary	P	P
Medical/Public Service Providers		
Assisted Care	P	X
Convalescent Care Facility/Nursing Home	X	P
Emergency Ambulance Services, Ground	X	P
Family Group Home	P	P
Hospice	SUP	P
Mortuary or Funeral Chapel/Mausoleum	X	P
Nursing and Personal Care Facility	X	P
Social Service Provider, Except Rescue	X	P
Public Accommodations		
Bed & Breakfast Inn	SUP	X
Caretakers Quarters/Domestic or Security Unit	X	AC
Utilities/Antennas		
Mounted Antenna of 15' of Less	P	P
Mounted Antenna of More Than 15'	SUP	SUP
Substations	X	X
Utility Installation, Other Than Listed	X	X
Utility Transmissions Lines	P	P
Auto Related		
Minor Auto Repair Garage	X	SUP

P=Permitted X=Use Prohibited AU=Accesory Use WC=With Conditions SUP=Special

2.5 Lone Mountain Master Development Plan

The acreage included in the Lone Mountain Master Development Plan was designated Planned Community Development (PCD) in the Northwest Plan Amendment to the City of Las Vegas General Plan adopted by City Council December 18, 1996.

The Planned Development category allows for a mix of residential uses including L (Low), ML (Medium Low) and M (Medium), maintaining an average overall density of 2-8 dwelling units/gross acre and includes a Village Center, neighborhood centers, business parks and office development. This area was proposed as a master planned area based on scheduled development and infrastructure.
See Figure 3 - Lone Mountain Land Use Master Plan

2.5.1 Development Phasing

Development of the Lone Mountain Master Planned Community shall commence at the Project's southern boundary and is expected to proceed north in a logical progression. Attached is an exhibit that demonstrates the planned phasing of this project, beginning with Phase 1 and ending with Phase 14.

Due to differences in land use emphasis and the dependence upon market conditions, individual areas are expected to develop at different rates. It is possible that more than one area may be under development at any given time, or development may not occur in the exact order as shown on the attached exhibit. Therefore, each individual phase will be required to extend all necessary utilities to that phase in order to provide adequate service. Additionally, full street improvements will be required adjacent to each individual phase as constructed. Temporary access roads will be constructed to each phase as needed in order to satisfy City of Las Vegas requirements.

WATER SERVICE

The Las Vegas Valley Water District (LVVWD) provides water service to the areas encompassed by and adjacent to the Lone Mountain Master Plan Development

The Lone Mountain Master Plan Development is bisected by the 2975 and 2860 Pressure Zones, as defined by the LVVWD. Pressure zones are based on topography and generally act as independent water systems with their own reservoirs and pipelines; therefore, land adjacent to existing development may be in an unserviced pressure zone. The Water Service Map indicates the major water facilities that are existing and proposed, as well as the different pressure zones for this site.
See figure 5 - Water Service

SEWER SERVICE

The Sanitation Division of the City of Las Vegas Department of Public Works provides sewer service to areas encumbered by and adjacent to the Lone Mountain Master Plan Development. The Sewer Service Map indicates all existing and proposed major sewer

interceptors (main sewer lines) in the area.

There is an existing 12-inch sewer mains located at the intersection of Grand Canyon Way and Gowan Road and a 12-inch sewer main in Alexander Road at Jensen Street. There is a proposed 12-inch sewer main located in Gowan Road west from Grand Canyon to Hualapai Way; and a future 12-inch sewer main in Alexander Road from Jensen Street to the Gilmore Road alignment.
See Figure 6 - Sewer Service

2.5.2 Traffic Study

A preliminary traffic study has been prepared for the Lone Mountain Master Planned Development which evaluates the adequacy of the proposed internal street system. This analysis provides recommendations for internal roadway and intersection geometrics and traffic control. Since final development plans are not available for individual parcels at this time, the City of Las Vegas may require updates to the preliminary master traffic study or additional traffic studies to evaluate the direct access to the parcels or any significant change of land use density.

Based on the results and conclusions of the preliminary master traffic study (Appendix D), the proposed internal and perimeter street network, as discussed below, are expected to provide adequate circulation and capacity for the master planned development.

- Cheyenne Avenue should be improved as an arterial roadway with a 100' right-of-way (ROW). Due to the existing power poles which are located within this right-of-way, the ultimate section for this road should include a raised island with left turn lanes at intersecting streets.

- Hualapai Way is proposed to be dedicated and constructed as a 100' ROW in the vicinity of the site and curve to the east and connect to Alexander Road to create a continuous roadway. The ultimate section for this road will have the potential to provide a two-way left turn lane and three travel lanes in each direction.

- Alexander Road is planned to be a 100' ROW that curves to the south to connect with the realigned Hualapai Way in order to create a continuous roadway. An extension of Alexander Road is also proposed as a 100' ROW to connect with the Hualapai/Alexander roadway and continue to the west across the future Beltway. Based on discussions with the City, the extension of Alexander Road west of the Beltway may ultimately connect to Cheyenne Avenue west of the Beltway. The ultimate section for this road will also have the potential to provide a two-way left turn lane and three travel lanes in each direction.

- Gowan Road is proposed to be an 80' ROW east of Hualapai Way and a 60' ROW west of Hualapai Way. East of Hualapai Way, Gowan Road can be delineated with a two-way left turn lane and two travel lanes in each direction. West of

Hualapai Way, Gowan Road will be curvilinear and taken off alignment and can provide a two-way left turn lane and one travel lane in each direction.

- An internal Loop Road which extends north of Cheyenne Avenue and crosses Gowa Road is proposed for the master planned development which will serve as a residential collector. This road is planned to be developed within a 60' ROW with a 48' roadway (back of curb to back of curb) and a 12' bike/walking path and landscaping. This roadway can accommodate a two-way left turn lane and one travel lane in each direction.

As requested by the City of Las Vegas, the master traffic study is being expanded to evaluate the impact this development may have on the future surrounding roadway network. This evaluation will include Cheyenne Avenue, Gowan Road, and Alexander Road between the master planned developmet and US-95. Under area buildout conditions, these roadways may be improved to provide up to six travel lanes with traffic signals spaced at half mile intervals. The development's fare share participation in these inprovements which may be required to provide acceptable levels of service and mitigate any traffic concerns caused by this master planned development will be indentified in the updated master traffic study.

In addition an understanding between the developers and the City of Las Vegas will ask the for the following conditions:

A Master Traffic Impact Analysis (see appendix D) for the overall 630 acres covered by this Rezoning Action and including the parcels internal to this Planned Development area noted as "Not A Part" in *Figure 2* - Development Parcels on Page 8 of this submission, shall be submitted to and approved by the Department of Public Works prior to the issuance of any permits or the recordation of any Final Maps anywhere within this site (with the specific exception of the 20 acre site adjacent to the Cheyenne Avenue rezoned with Z-108-96) as required by the Department of Public Works. The Master Traffic Impact Analysis shall identify necessary roadway infrastructure improvements and overall Traffice Signalization needs within the proposed PD Area, and shall propose an implementation program for the dedication and construction of such required improvements, including a Phasing Plan identifying appropriate Milestones (such as certain number of units built) that will trigger the timely construction thereof. The Master Traffic Signal Participation Schedule defining each internal development's responsibility on a per-acre or per-development basis. The Master Traffic Impact Analysis shall address the development of all public streets shown on Figure 2 - *Development Parcels* on Page 8 of this submission.

A Master Drainage Plan (see appendix E) for the overall 630 acres covered by this Rezoning Action, and including the parcels internal to this Planned Development area noted as "Not A Part" in *Figure 2 - Development Parcels* on Page 8 of this submission, shall be submitted to and approved by the Department of Public Works prior to the issuance of any permits or the recordation of any Final Maps anywhere within this site (with the specific exception of the 20 acre site adjacent to Cheyenne Avenue rezoned with Z-108-96) as required by the Department of Works. The Master Drainage Plan shall identify necessary drainage infrastructure improvements within the proposed PD Area and shall propose an implementation program for the construction of such required improvements, including a

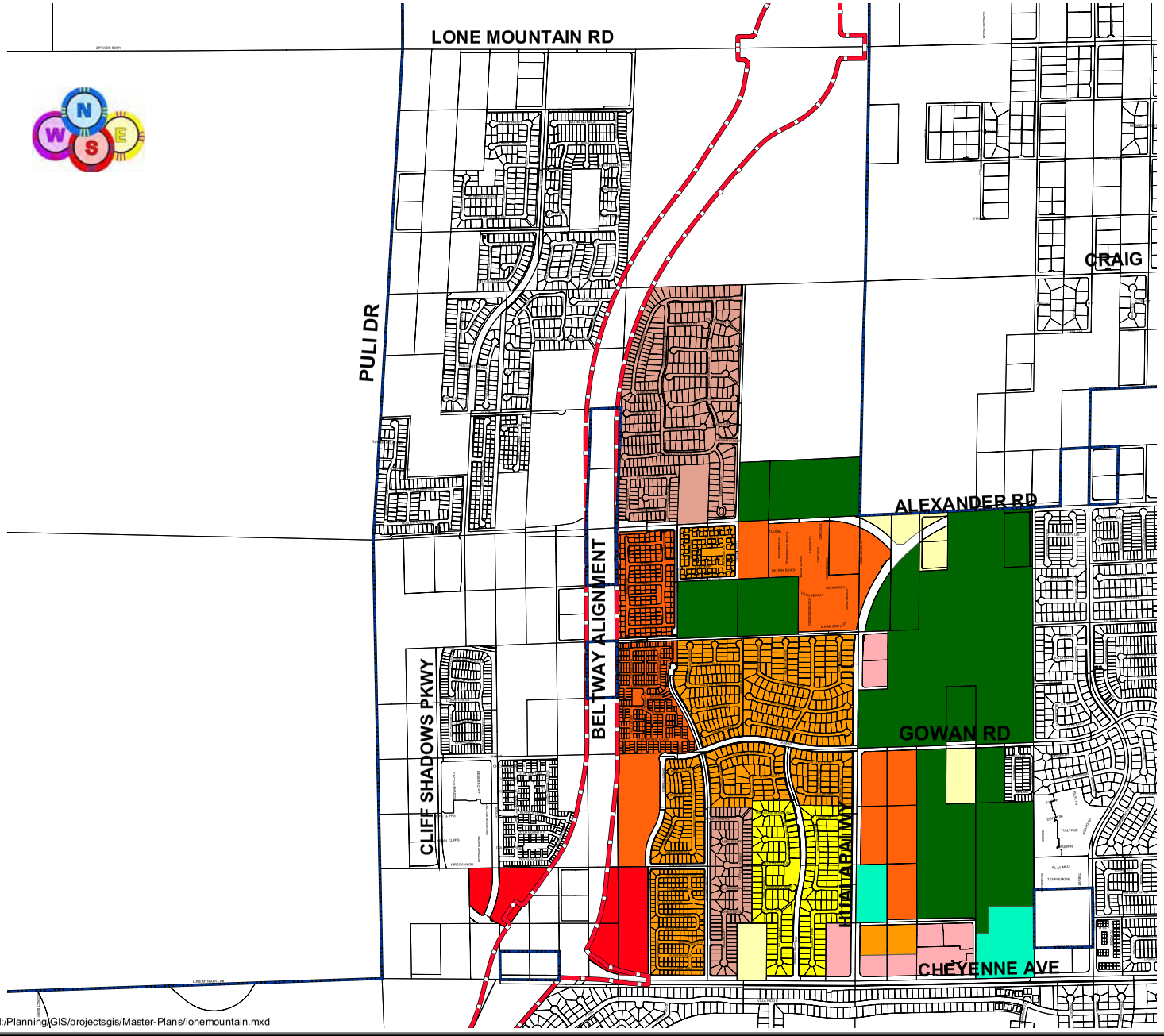
Phasing Plan identifying appropriate Milestones (such as a certain number of units built) that will trigger the timely construction thereof. The Master Drainage Plan shall clearly identify the parties responsible for each phase of construction and those parties responsible for future maintenance thereof. The proposed PD Zone area established development densities in excess of those assumed by the Lone Mountain Detention Basin Report. The Master Drainage Plan shall address the impact of these higher densities on the available storage volume of the Lone Mountain Detension Basin and recommend methods to mitigate the effects thereof; excavation and/or modification of the Lone Mountain Detention Basin shall be the responsibility of the developers of the proposed PD Zone area, and shll be included in the overall Phasing Plan required above. The Master Drainage Plan shall address the development of all public drainage facilities shown on Figure 2 - *Development Parcels* on Page 8 of this submission.

Extend public sewer to the west edge of this site in one or more locations acceptable to the City Planning Engineer as required by the Department of Public Works.

Site-specific Drainage Plans and Traffic Impact Analyses may be required as each internal site develops as required by the Department of Public Works. The City reserves the right to impose additional site-specific conditions with future site development actions.

2.6 Planned Development District

2.6.1 The Planned Development (PD) District is the Zoning mechanism for implementing the Lone Mountain Master Development Plan. See Figure 2 - Development parcel Map. See adopted CLV Zoning Ordinance.



City of Las Vegas

LONE MOUNTAIN

PLANNED COMMUNITY DEVELOPMENT

Future Land Use for Lone Mountain

- Planned Community Development
- Low
- Multi-Family Medium
- Medium-Low
- Medium-Low Attached
- Neighborhood Commercial
- Park/School/Recreation/Open Space
- Public Facility
- Village Commercial
- City Limits

Figure 3

Printed: July 6, 2004

PLANNING & DEVELOPMENT
DEVELOPMENT SERVICES CENTER

GIS maps are normally produced only to meet the needs of the City. Due to continuous development activity this map is for reference only. Geographic Information System Planning & Development Dept. 702-229-6301

CITY OF LAS VEGAS NEVADA

Figure 4 - PHASING MAP

LONE MOUNTAIN PLANNED COMMUNITY DEVELOPMENT

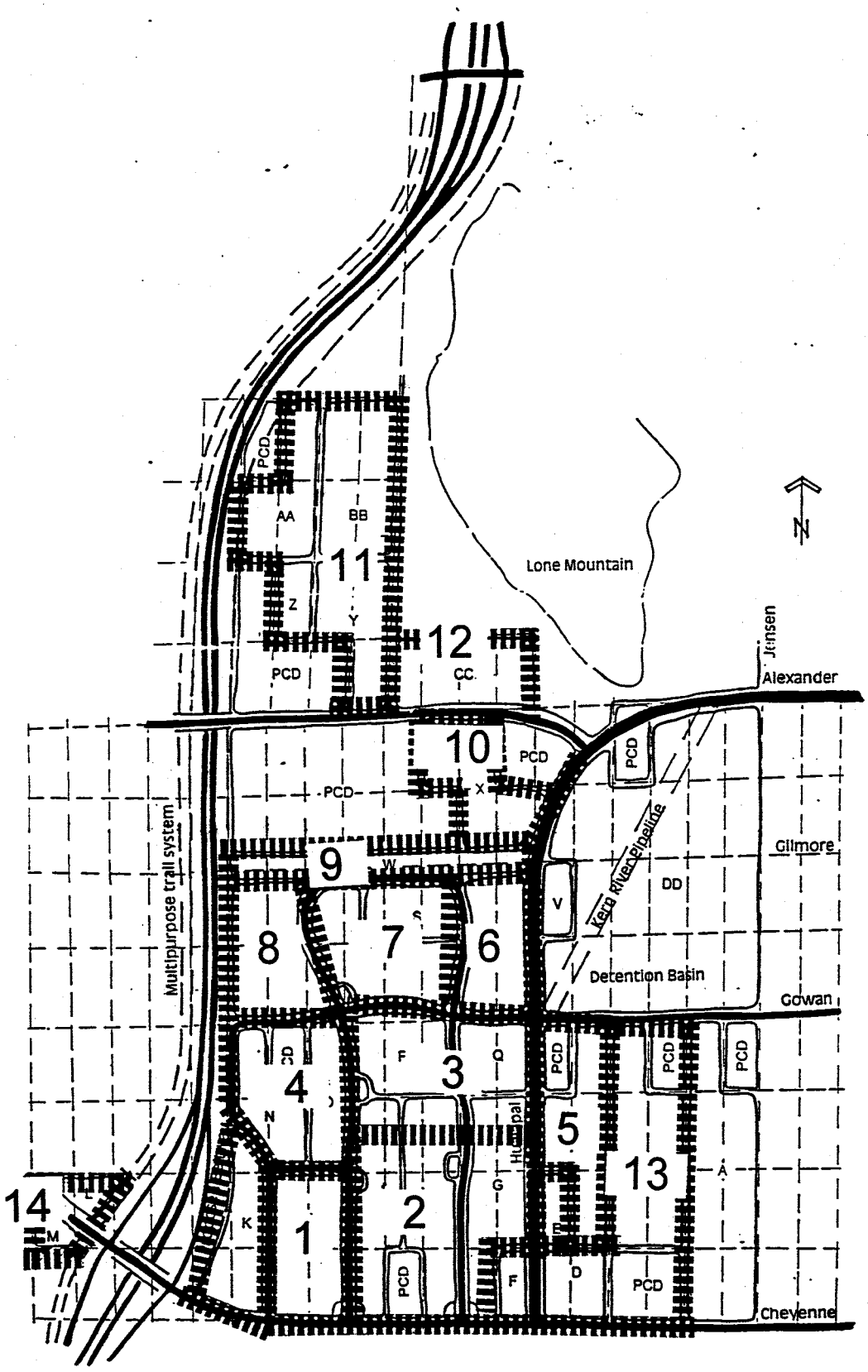


FIGURE 5- WATER SERVICE

LONE MOUNTAIN PLANNED COMMUNITY DEVELOPMENT

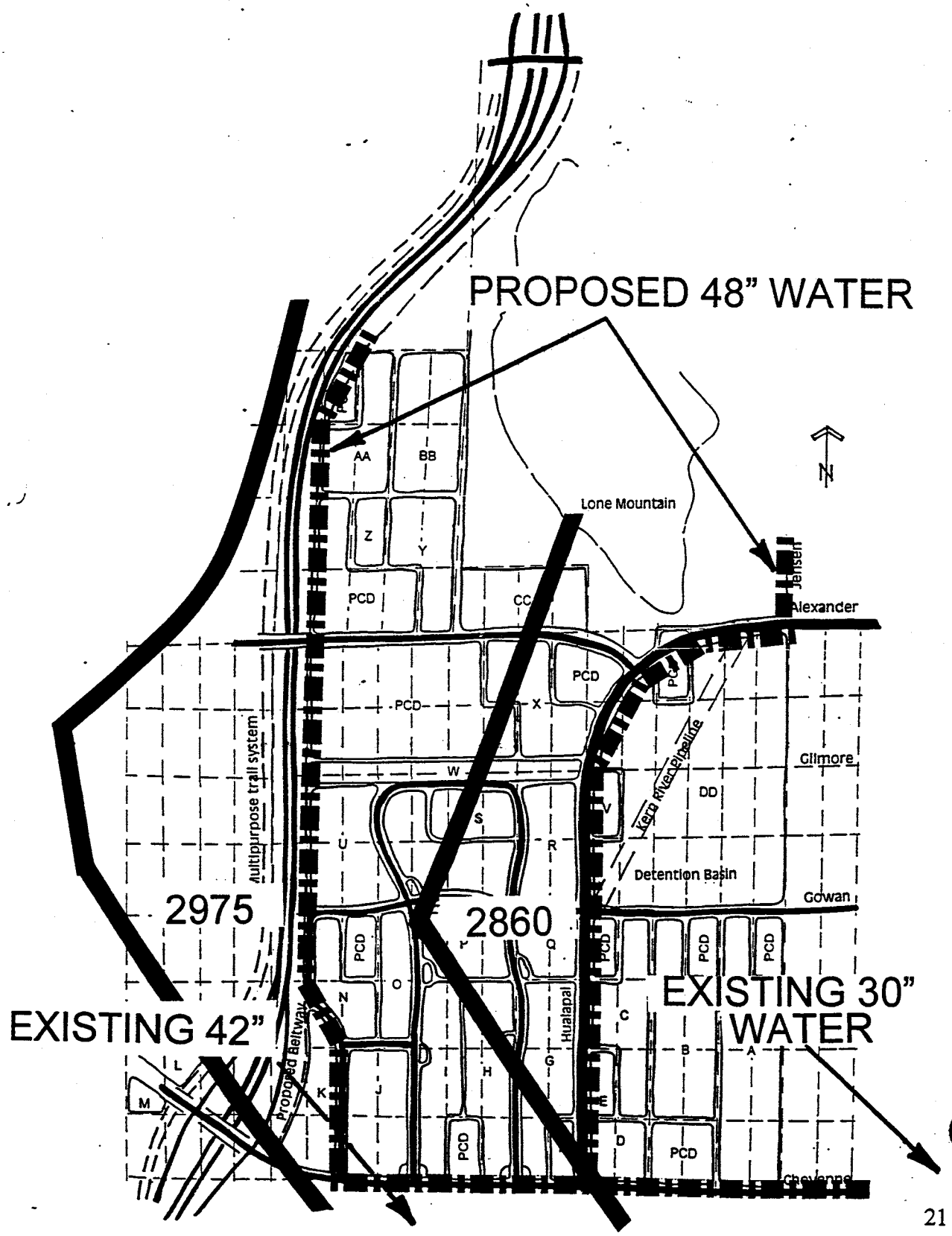
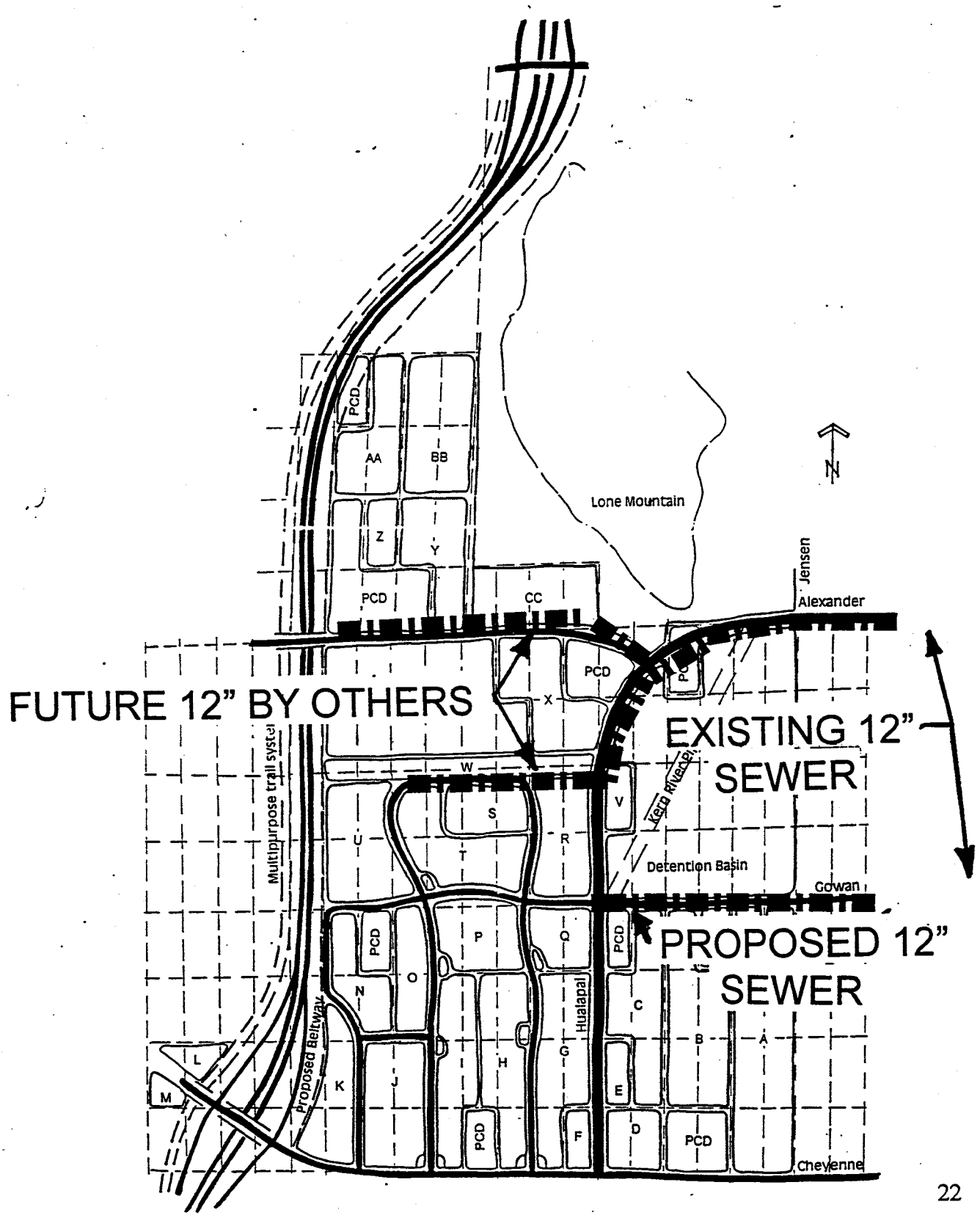


FIGURE 6 - SEWER SERVICE

LONE MOUNTAIN PLANNED COMMUNITY DEVELOPMENT



3. SITE PLANNING GUIDELINES - GENERAL REQUIREMENTS

3.1 Objectives

3.1.1 The overall intent of the Standards and the Design Review Process is to promote the creation of an attractive, high-quality environment for the residences, business, and public space within Lone Mountain Master Development Plan area. The CLV shall favor:

- integration of design elements within a project,
- high-quality, durable finishes,
- a positive relationship to the pedestrian, and
- visual continuity within Lone Mountain Master Development Plan area and with the Northwest community.

3.1.2 When referring to this document, the owner/developer and designer shall keep in mind that these Standards begin with the general requirements, and progress toward more specific requirements. ***NOTE:*** ***<u>The general requirements apply to all subsequent sections.</u>***

3.2 Streets / Circulation / Patterns

3.2.1 **Streets:** Streets shall be configured to provide safe, efficient vehicular circulation with streetscapes that provide a pleasant environment. All streets shall be improved by individual builders and designed in accordance with the Standards, which provide flexibility while ensuring that internal streets are appropriately sized, as per the subdivision code, and contribute to a desirable neighborhood. In addition,

(a) The design of Lone Mountain streets may incorporate "traffic calming devices" where appropriate.
(b) The design of internal subdivision streets shall discourage through traffic.
(c) The design of streets shall favor curvilinear and bent grid patterns.
(d) Landscaping shall be incorporated into all major public and private street system of 60' ROW or above per the city Landscape, Wall, and Buffer Standards

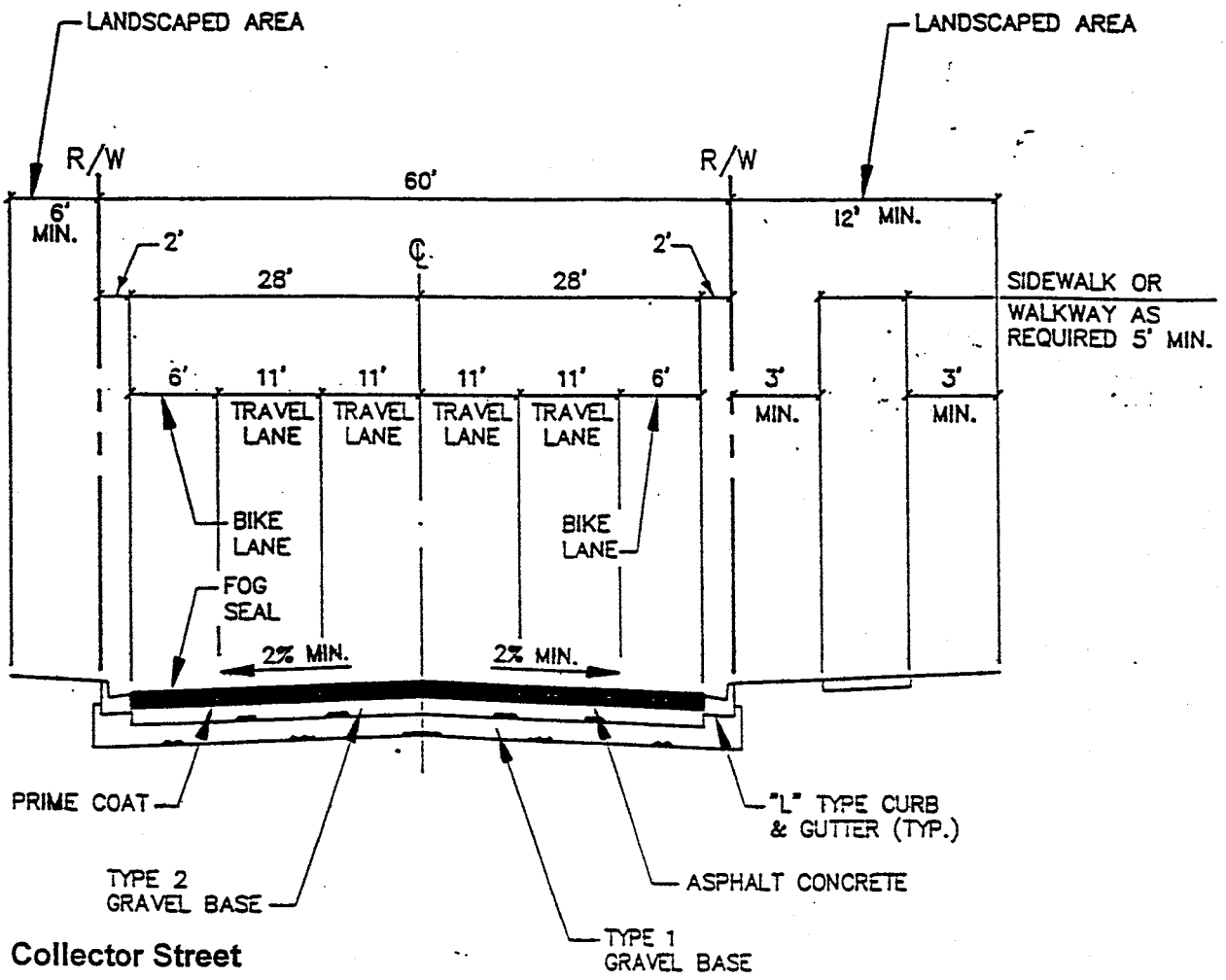
3.3 Streetscapes

The Streetscape shall be that area from the back of the curb over to wall, and including the sidewalk. The parcel developers shall provide street trees and other plantings with drip irrigation, streetlights and appropriate walkways which meet or exceed City of Las Vegas standards. Streetscape is to be maintained by HOA's after being developed by the adjacent land owner.

3.3.1 Streetscape Lighting

(a) Lighting design and installation shall be in conformance with City of Las Vegas standards.

FIGURE 7 - STREET SECTION EXHIBITS

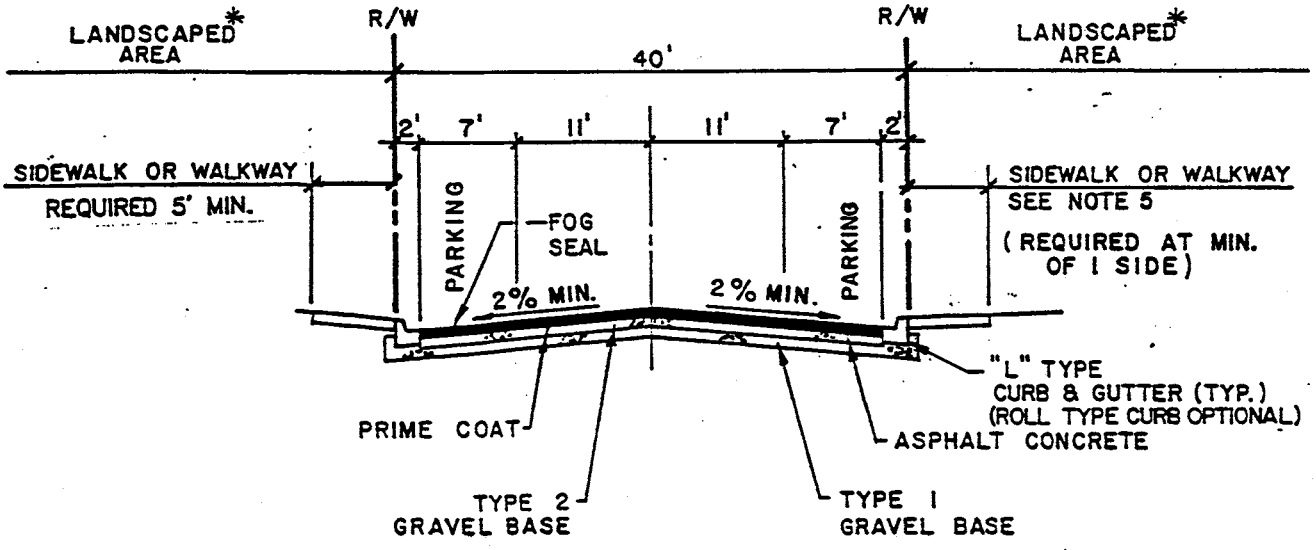


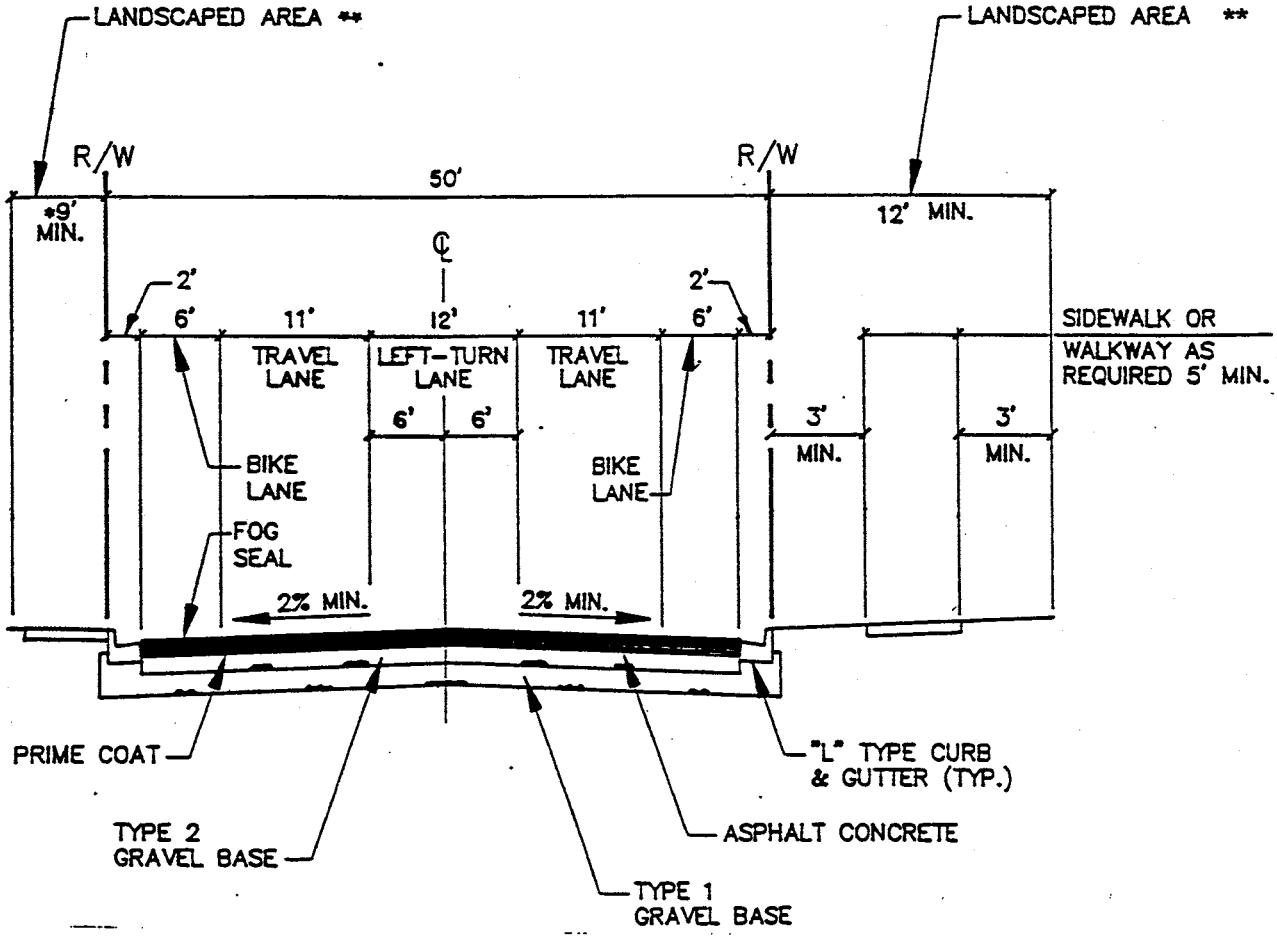
Collector Street

Notes:

1. See appropriate Design Standards for landscape treatment and width.
2. See General Notes for additional information.
3. See City of Las Vegas standards for location of utilities.
4. Street section to be flared to 60 feet at intersections with equal or higher street classifications. See City of Las Vegas standards.
5. Street lights shall not encroach into sidewalks or walkways.
6. Pavement markings, signage, and traffic control facilities shall comply with section 9 of the most current edition of the M.U.T.C.D. specifications.
7. HOA to maintain the landscaping outside the R.O.W.

Figure 8 - STREET SECTION EXHIBITS





Residential Street

* Private residential street to have a reduced ROW for a 5' sidewalk on one side of the street.

**Landscaping behind R.O.W. to be maintained by HOA's

(b) Area lighting shall be provided along all public and private streets. Light standards and pole height shall be scaled to the street dimension illumination requirements. All street light fixtures shall utilize high-pressure sodium lamps. Cobra heads are not allowed.

(c) Pedestrian areas, including off-street trails, pathways, parks and other public areas shall be illuminated in hours of darkness especially where grade changes involving ramps or stairs occur. Lighting in these areas shall be provided by low overhead fixtures (10' - 15' height) and/or bollard lighting.

(d) Outdoor recreational facilities shall be illuminated when feasible and necessary. The lighting design of these facilities shall not impact adversely adjoining properties with misdirected light and shall be approved by the City of Las Vegas.

(e) All lighting plans shall be submitted to and approved by the City of Las Vegas.

3.4 Multipurpose Pathways

3.4.1 **Pathways and walkways:** Multipurpose Nonmotorized Pathways are incorporated into the Lone Mountain Master Development Plan site to link mixed use, residential, and commercial areas and community facilities in a safe, functional and aesthetically pleasing design. The continuous system is accomplished through use of walkways and pathways. See Figure 9 - Multipurpose Pathway System.

3.4.2 **Multipurpose Pathways,** in developments, shall provide:

(a) Continuously linked walkways within each parcel and connecting adjacent parcels, commercial areas, and schools.

(b) A pedestrian link onto the site from the public pedestrian walkway system.

(c) Pedestrian friendly intersections per City of Las Vegas standards.

(d) Simplified median crossings for pedestrian safety.

(e) Pathway illumination to complement streetscape lighting if designed as a separate system.

(f) Clearly designated areas as a "pedestrian zone".

(g) Concrete is the preferred material for public and private walks, adjacent to the street and within public open space.

(h) Other pathway materials, such as jogging paths of stabilized material, are to be specified on drawings.

(i) Enhanced paving details in the form of stains or integral color, stone, textures or stamps, and paving units are encouraged for emphasis or to identify special features and circulation patterns, especially for crosswalks and entries into development parcels.

(j) Street furniture, light poles, and other site furnishings shall not encroach upon the required width of the sidewalk.

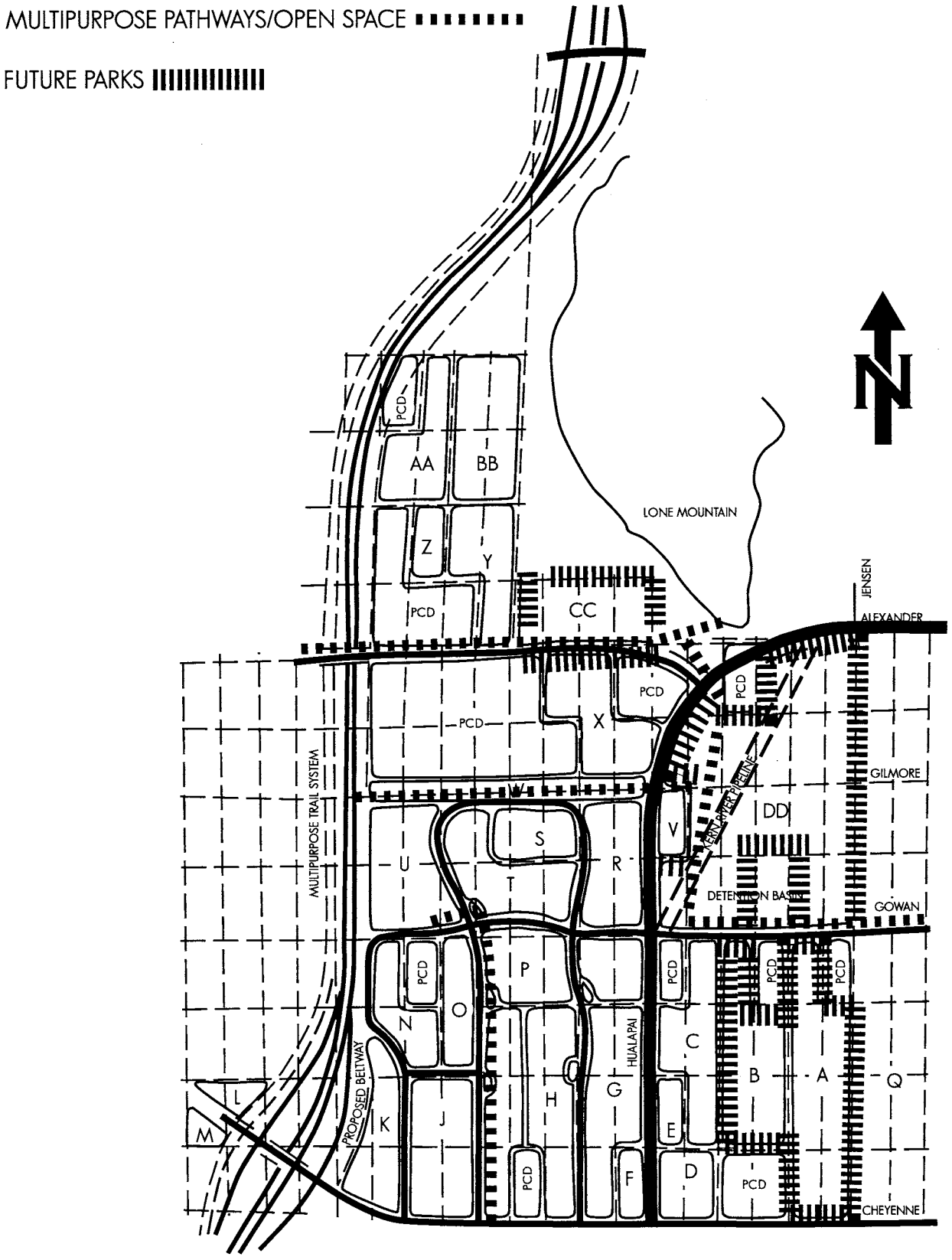
3.4.3 **Sidewalk Hierarchy**

(a) All sidewalks and pathways must meet or exceed City Code.

(b) Sidewalks within primarily residential areas shall meet or exceed City standards,

LONE MOUNTAIN PLANNED COMMUNITY DEVELOPMENT

Figure 9 – MULTIPURPOSE PATHWAYS



and along the mini-pocket park circuit they shall be six (6') feet in width.

(c) Pedestrian crossing points will be provided along and at all major intersections.

(d) Specified sidewalk widths shall not include width of curb.

(e) Sidewalks must be physically separated from vehicular travel lanes by curbing, changes in grade, barriers, landscaping, or other means, except at crosswalks.

(f) Any particular sidewalk treatments (exposed agregate, etc.)

3.4.4 **Internal Pedestrian and Bicycle Movement**: All subdivisions, multi-family developments, commercial and institutional uses will have internal circulation systems. Components of internal systems may consist of both on-street and off-street facilities. The following guidelines shall be considered in designing these systems:

(a) Connections shall be made between the internal systems and the overall walkway and pathway system.

(b) Where access is desired, connections will be made between the internal systems and perimeter facilities. Connections to adjoining subdivisions, neighborhoods and projects are required unless a natural obstacle cannot be reasonably overcome.

(c) On-street sidewalks in residential areas are encouraged to be a minimum of five feet (5') wide on local neighborhood streets. On-street sidewalks will not necessarily be required in all locations. Required sidewalk locations will be determined with the tentative map and in accordance with the City of Las Vegas regulations.

(d) Multi-purpose, off-street, trails are encouraged as an alternative to on-street facilities within builder parcels. These trails shall connect to the overall Multipurpose Pathway pedestrian circulation system. The internal multipurpose trails shall be a minimum of six feet (6') wide and shall be located within a landscaped easement not less than fifteen feet (15') wide, and provide activity points along the pathway to qualify for open space credit.

(e) Bicycle circulation is an appropriate function of local and neighborhood streets. A separate on-street lane for bicycle use only is not required, however, designated on-street routes shall be clearly signed if provided.

3.4.5 **Bicycle Lanes, Routes and Paths**

The bicycle circulation system within Lone Mountain Master Plan is provided for recreational purposes as well as to encourage alternate means of transportation within the community. Bike routes may be established connecting within neighborhoods connecting to arterial and collector level roads and the open space multi-purpose pathway system. Bike routes shall utilize neighborhood and local streets. See street sections

3.4.6 **Pathway Lighting**

The Multipurpose Pathway system shall be well lighted to maintain security and

encourage use of the pedestrian network. In many cases street lighting will provide sufficient lighting when pathways are integrated with street cross section.

3.5 Setback Requirements / Adjacency Issues

3.5.1 Setback information is provided in this section, Figures 10, 11, and 12 and are minimum requirements. Setbacks are measured from the property line along street frontages, and from the respective property line for internal conditions. Vehicular areas include parking areas and vehicular circulation drives.

3.5.2 Landscape of Setback Area: All required setback areas shall be landscaped in a manner complementary to the on-site architecture and right-of-way design concept. Portions of the landscaping between the back of the curb and the sidewalk may have to be coordinated with the street landscape design as part of the "Loop Road" open space system. Other areas may potentially be added to the open space system but requires additional criteria to constitute acceptance as public open space.

3.5.3 Internal Property Lines: Because maintenance of areas narrower than ten feet (10') wide is impractical, building setbacks along internal property lines (side property lines not fronting on a public right-of-way) shall be either two inches (2") and smaller, or ten feet (10') and greater. For example, a setback of five feet is not allowed.

3.6 Walls - All Primary Streets

3.6.1 **Walls:** Walls are discouraged in places where they are not necessary for security, screening, or privacy. Notwithstanding, walls can provide decorative appeal and help to establish continuity within the community; therefore, consistency in the design of walls is essential. The CLV Landscape, Wall, and Buffer Guidelines are the minimum standards that must be followed. The following guidelines apply to the design of walls within the project area that go beyond the CLV standards:

(a) Walls along primary streets shall be the Lone Mountain theme wall. The wall material will be a Cin-der-lite brand block consisting of split face(brown) 8"x8"x16", CMU(brown) 8"x6"x16", and fluted(chocolate brown) 8"x8"x16" or equal. See Figure 13.

(b) The materials, color, and finish of all other walls and fences shall be compatible with the community theme wall, the site architecture, and the overall character of the Lone Mountain Plan area.

(c) Low walls and open rail walls are encouraged and shall be used to allow views into residential areas, parks and open space, and to minimize the length of solid wall surfaces.

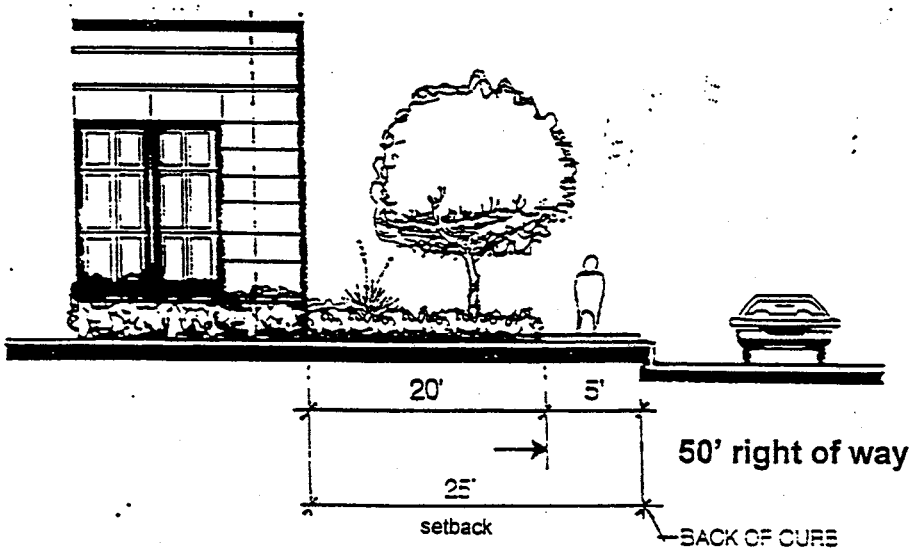
(d) Long stretches of unrelieved flat wall surfaces shall be avoided. The design of walls shall incorporate columns, off-sets, open rail segments, and plantings. A standard run will consist of a 200' run with a 2' offset minimum on street exposed walls. See figure 14.

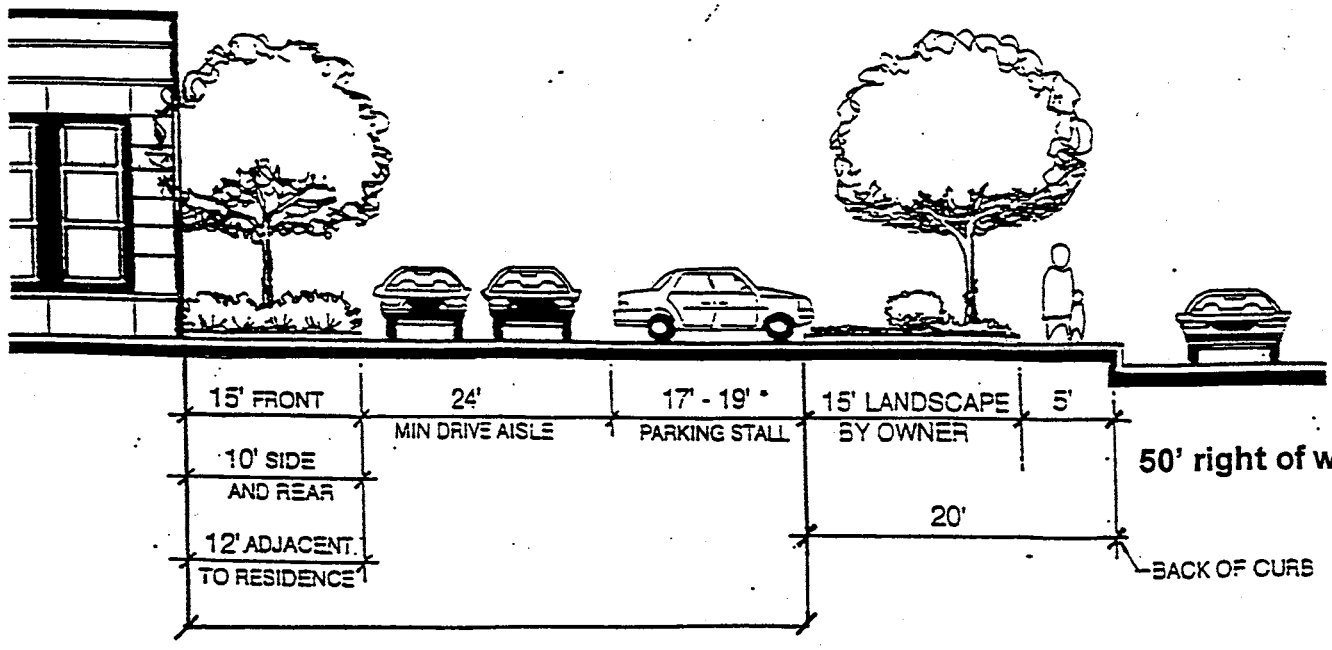
(e) To accommodate grade changes, walls shall step rather than slope, with

individual steps not to exceed eight inches. Ends of walls shall return into the site to maintain a finished appearance.

(f) Wall height is limited to six feet, in general, not including pilasters.

Figure 10 - **VEHICULAR AND BUILDING SETBACKS, BUILDING HEIGHTS**
NEIGHBORHOOD OR VILLAGE COMMERCIAL
50' right of way



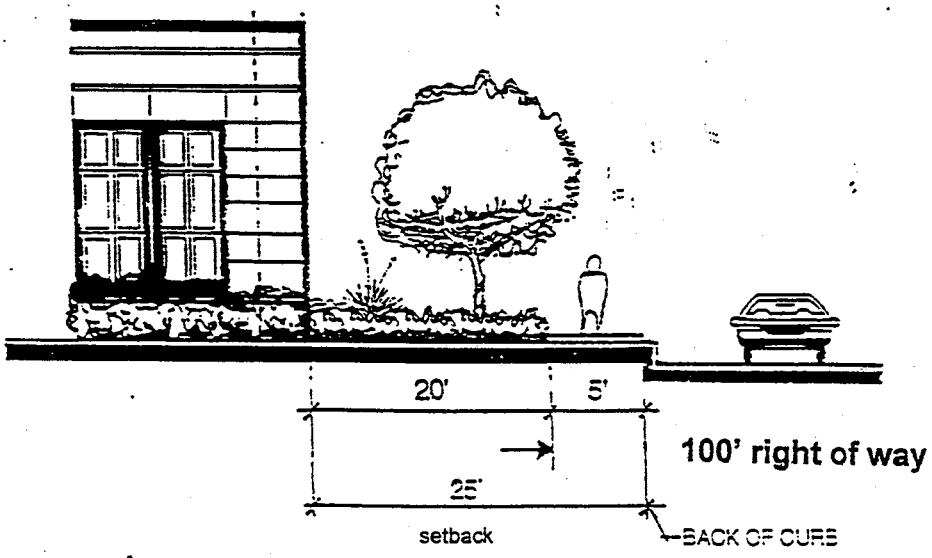


*Parking lot to include 2' tire stop from curb.

Figure 11 - VEHICULAR AND BUILDING SETBACKS, BUILDING HEIGHTS

NEIGHBORHOOD OR VILLAGE COMMERCIAL

100' right of way



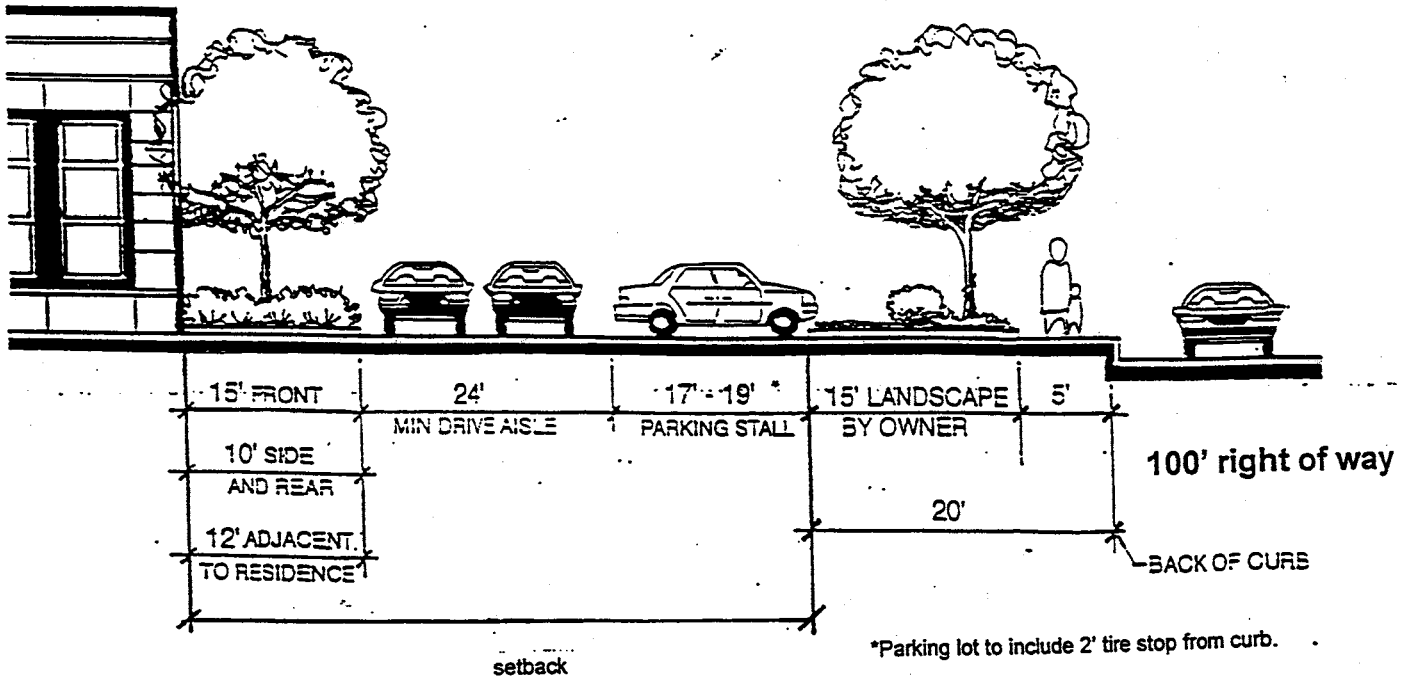
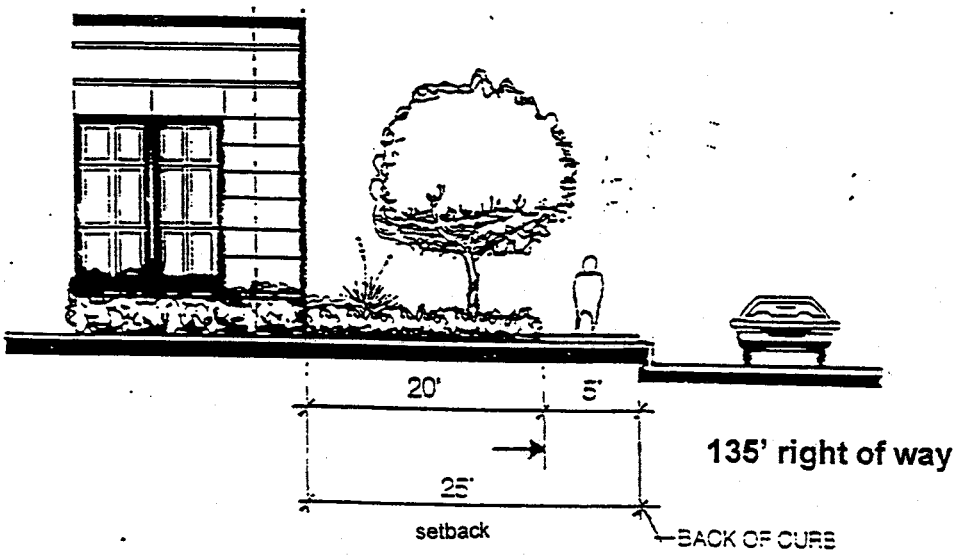
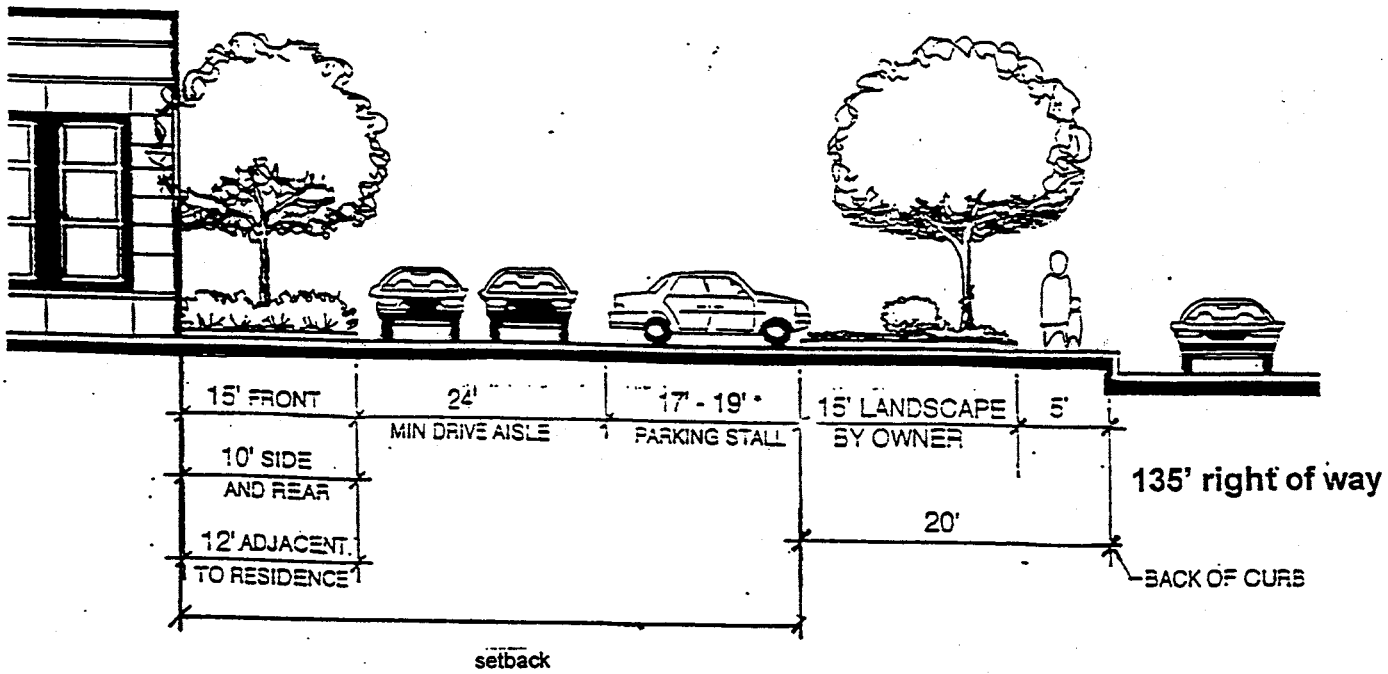


Figure 12 - VEHICULAR AND BUILDING SETBACKS, BUILDING HEIGHTS

NEIGHBORHOOD OR VILLAGE COMMERCIAL

135' right of way





*Parking lot to include 2' tire stop from curb.

Figure 13 - LONE MOUNTAIN THEME WALL, COLUMN AND CAP

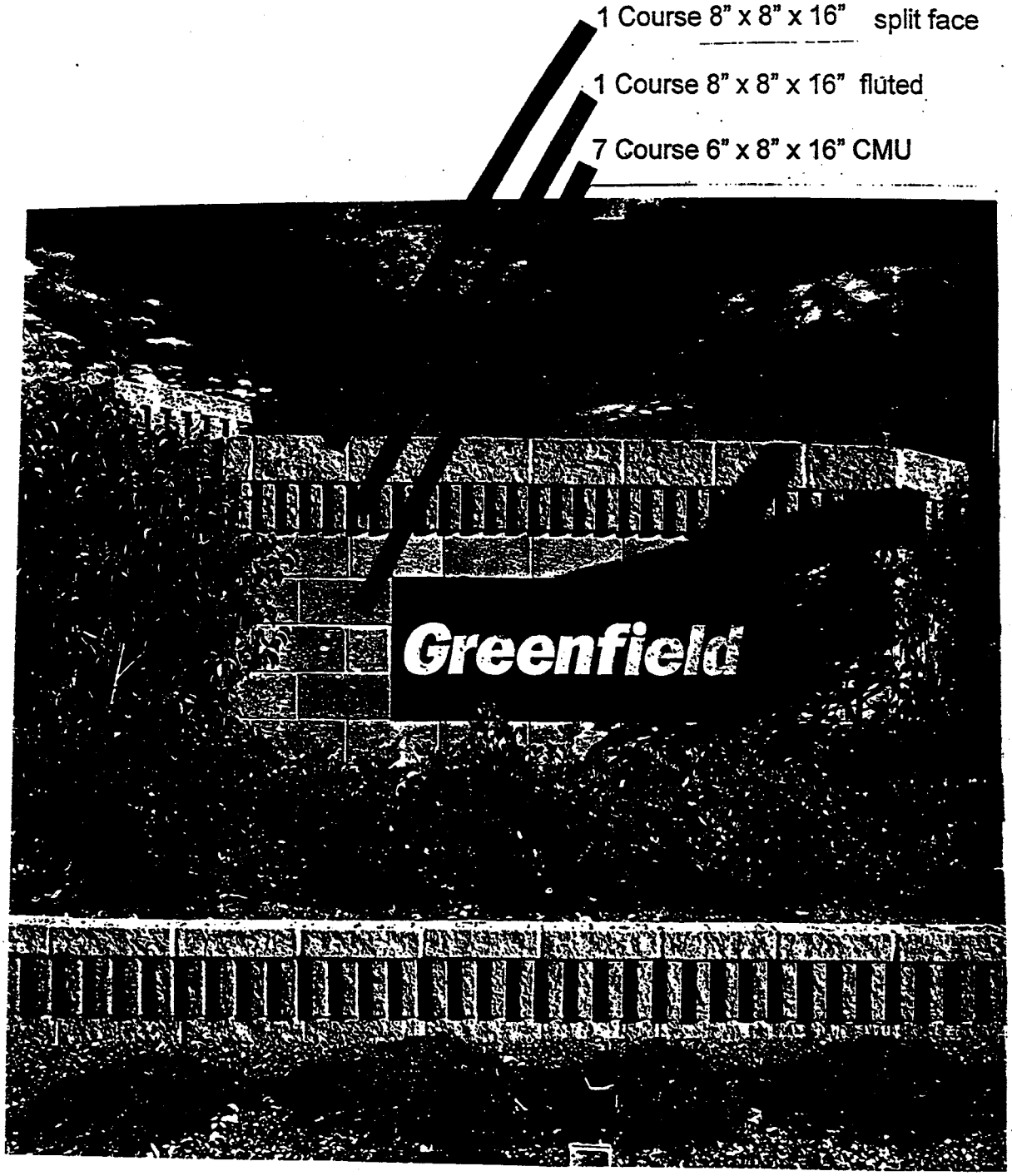
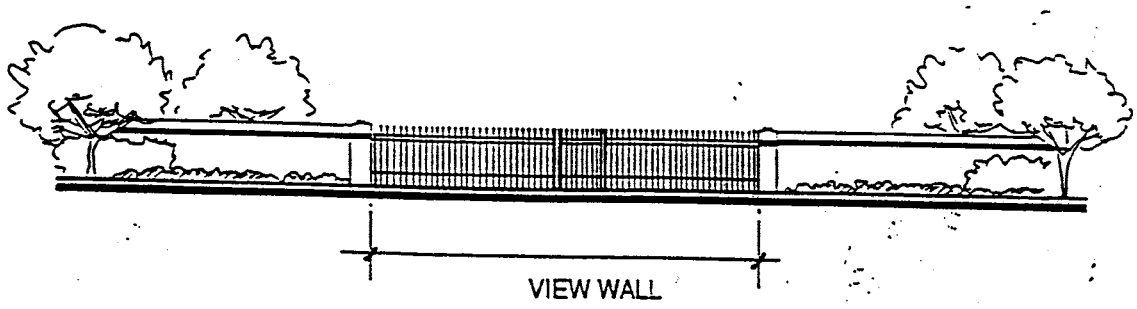
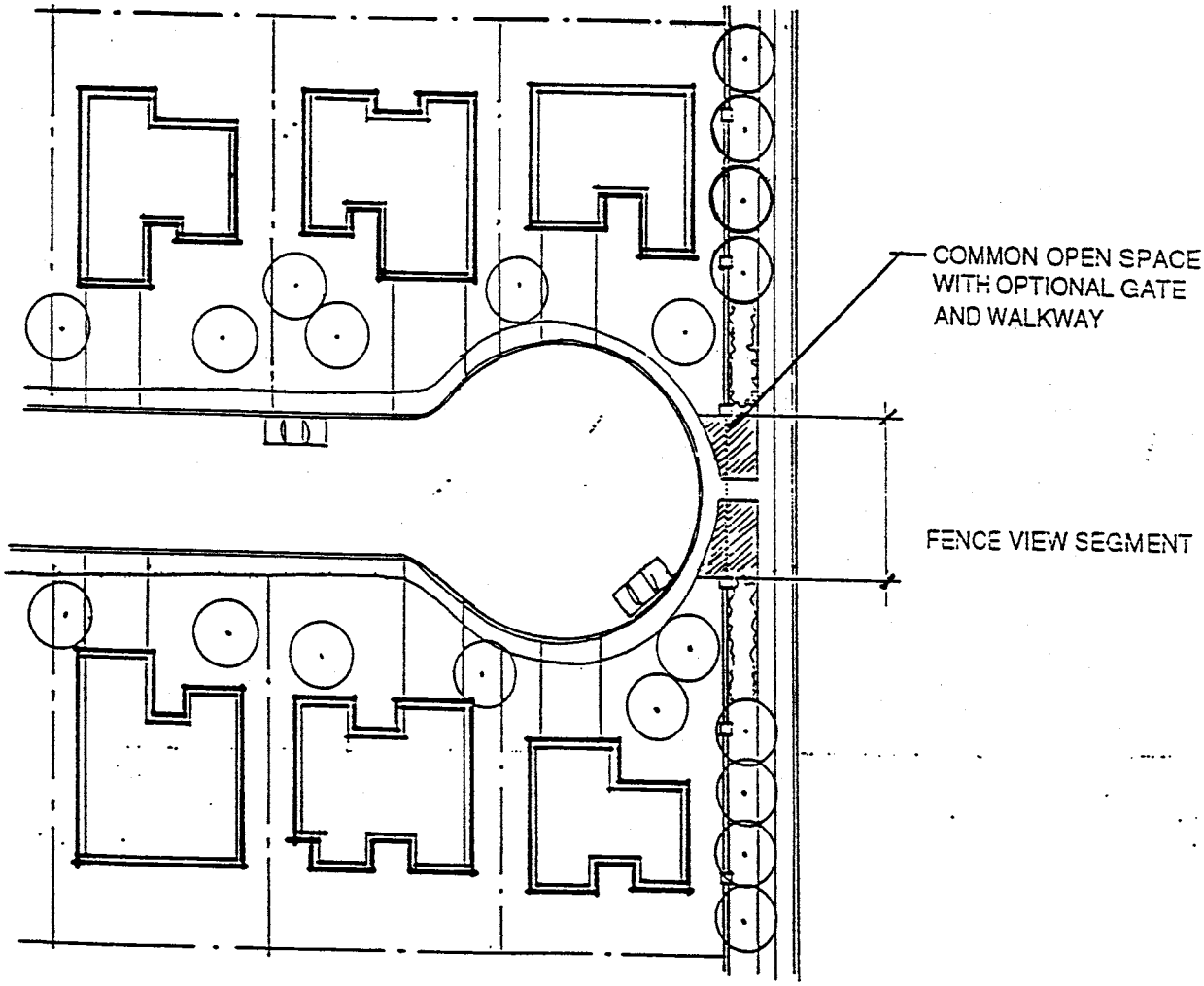


Figure 14- VIEW WALL





(g) Within any required sight triangle, wall heights shall be less than thirty inches.

(h) Walls that join the community theme wall shall join at the same top-of-wall elevation or lower. Walls higher than the theme wall shall step down (each step maximum of 8") to the same top-of-wall elevation a minimum of 4' horizontal distance from the point of connection. Individual steps shall not exceed eight inches.

(I) Retaining walls shall not exceed three feet, six inches (3'-6") in height. Grade changes that require retaining over 3'-6" must be terraced with a minimum of five feet (5'-0") clear horizontal separation between walls.

(j) A retaining system that combines planting pockets with soil retention is an acceptable alternative to the above under certain circumstances. Use of such a system will be subject to the approval of the CLV.

(k) Retaining walls require waterproofing treatment that consists of asphalt waterproofing along with a strip drain seepage barrier, as well as weep holes, crushed rock or perforated pipe drainage.

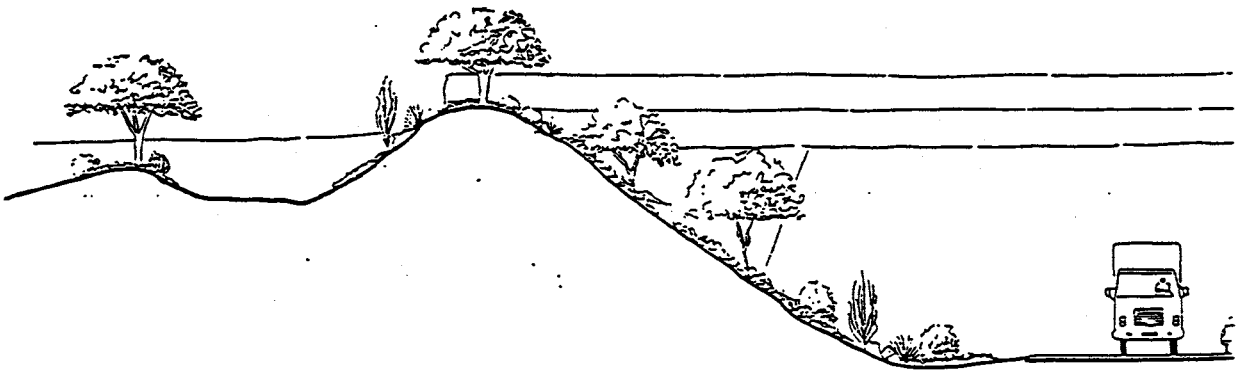
(l) The overall height of a retaining wall combined with a freestanding wall, if visible from any street or open space area, shall not exceed nine feet, six inches (9'-6").

(m) Curvilinear sections in walls are permitted only if compatible with the overall desired character of the development.

(n) Walls shall be regularly maintained and refinished as needed. Damaged walls shall be repaired within a reasonable period of time. In order to minimize water damage to walls, any landscaping within 3' of walls shall employ subsurface irrigation.

(o) Visible barbed or razor wire fencing is prohibited except during construction.

3.6.2 **Beltway sound wall/berm:**



3.6.3 **Screen Walls and Fences:** Screening treatments must be designed as an integral part of the overall architectural and landscape design. CLV Landscape, Wall, and Buffer Guidelines are minimum standards. The following are in addition to those minimums.

(a) Streetscape fences and screens within landscaped setbacks shall match the Lone Mountain theme wall.

(b) Landscaping may be used as an acceptable screen for passenger vehicles. However, landscaping alone is not acceptable for service area screening.

(c) Screen walls are to be used only where required for service area security and screen purposes. Otherwise, walls without a demonstrable purpose, that create the impression of a walled compound, are not allowed.

(d) Screen walls, fences, and retaining walls shall observe the parking setback requirement along public rights-of-way.

(e) Retaining walls visible from any street or open space area shall not exceed three feet six inches (3'-6") in height. Grade changes that require more retention must be terraced with a minimum of five feet (5'-0") separation between retaining walls.

(f) A retaining system that combines planting pockets with soil retention to achieve a steeper slope is an acceptable alternative to the above under certain circumstances.

(g) Retaining walls combined with freestanding walls, if visible from any street or open space area, shall not exceed nine feet six inches(9'-6") in height.

(h) Construction materials for screen walls, fences, and retaining walls shall be of durable materials. The design and construction of these elements shall have the same level of finish on all sides (i.e. no front or "good" side, nor back or "bad" side). Acceptable materials are painted wrought iron, split face masonry, stuccoed masonry, plaster-coated or decorative-textured finished concrete block, and tilt-up concrete panels.

(I) Prohibited materials are wood fencing, plain galvanized chain link with or without slats, painted and untinted CMU,and barbed wire/razor ribbon.

(k) Contrasting colors that are project consistant.

3.7 Signage: Signage shall be used to reinforce the desired character of the Lone Mountain Plan area, and to call attention to certain features. All signs erected or installed in the Lone Mountain Master Development Plan area shall be reviewed by the City of Las Vegas.

1. The specifications for and location of all signs shall be submitted for City of Las Vegas approval (see City of Las Vegas Sign Code.)
2. Sign materials shall be compatible with associated architecture. Acceptable materials include brass, bronze, galvanized and painted or prefinished steel, anodized or painted aluminum, painted or prefabricated steel, ceramic tile, various types of stone, brick, and painted stuccoed CMU. Wood, because of rapid deterioration in our climate, is unacceptable except as temporary signage.
3. Bases for free-standing signs shall be of architectural concrete, masonry, or similar material. Pole mounted signs are not allowed.
4. Lighting for any sign shall be of even intensity and from a concealed source. Signs in

commercial areas must be internally illuminated. Sign colors shall be consistent with the associated architecture and the overall architectural theme of the Lone Mountain PCD, yet provide sufficient contrast for legibility.

5. Design of all traffic control signage shall be in accordance with the Manual of Uniform Traffic Control Devices published by the U. S. Department of Transportation, the applicable Nevada Department of Transportation Standards, and the requirements of the City of Las Vegas Engineer.
6. Consolidate street and stop signs and mount to street light standards to minimize the number of sign poles.
7. Preserve clear sight triangles of roads and driveways when placing signs.Signs fasteners shall be maintained in good repair at all times.
8. ALL signs shall be less than twelve (12') in height.
9. Raceway lights and billboards are prohibited.
10. Monument and tower/ kiosk signage shall meet CLV sign standards.

3.8 Entry Features: Participating developers and builders shall install neighborhood or other project entryways to identify the entry and establish an image for the project. The following guidelines shall be considered in design of project entries:

(a) The area reserved for project entries shall be limited to geometric designs at each entry corner measuring at a minimum forty feet (40') from the right-of-way lines of the intersecting streets. The design of project entries shall maintain all CLV required site triangles.

(b) The project entry shall encourage the incorporation of featured landscape treatments, enhanced paving details, signage and lighting where appropriate.

(c) Controlled uplighting for trees, signs, and sculptural elements is encouraged.

(d) Two project identification walls, monuments, or ground signs are permitted for each major street frontage. One or two signs per entry, based on perimeter street frontage, will be allowed.

(e) The sign surface area shall not exceed 48 square feet. Sign copy is limited to the name and, in some cases, the name and address of the development.

3.9 Site Furnishings: Location of all site furnishings must be indicated on plans submitted for approval by the CLV. The following guidelines shall be considered in the design, selection, and placement of site furnishings such as mail boxes, newspaper dispensers, benches, drinking fountains, bicycle parking structures, bus shelters, public telephones, exercise stations and trash receptacles:

(a) Where feasible, site furnishings shall be clustered and behind sidewalks, combining seating, telephones, lighting, newspaper dispensers, and mail boxes.

(b) Grouped residential mail boxes shall meet the requirements of the United States Postal Service, and may be designed to reflect the architectural theme of the project.

(c) Bollards shall be used wherever a separation of vehicular and pedestrian traffic is required, and must be visible to drivers of vehicles. Bollards shall be a minimum of 18" high, a maximum of 42" high, with a diameter not less than 4". Bollard design shall fit into the overall architectural character of the project and community.

(d) The location of bus shelters shall be coordinated with the City Engineer and appropriate transportation officials. Recommended bus shelter locations include near commercial areas and other areas generating significant bus passengers, such as multi-family developments. Advertising will not be permitted on any bus shelter in Lone Mountain. Minimum requirements for bus shelters include provision of shade, a place to sit, protection from the elements, and a trash receptacle. The materials and design of the structure shall be consistent with the overall character of the development, and will be on a separate easement behind the sidewalk. Developer to supply or build bus shelters.

(e) Benches, trash receptacles, and drinking fountains are appropriate in areas where heavy pedestrian traffic is anticipated, such as commercial areas, multi-family developments, and parks. The design of these elements shall be compatible with the overall character of Lone Mountain, and shall not pose a safety hazard to pedestrians, bicyclists, or motor vehicles.

(f) Newspaper and other vending machines, mail boxes and similar elements shall be inconspicuously located, set back from the public right-of-way. The placement of these elements shall not pose a safety hazard to pedestrians, bicyclists, or motor vehicles, and shall not infringe on the required sidewalk width or pathways.

3.10 Lighting: The design intent for lighting is to provide safe and functional lighting in an aesthetically pleasing, visually unobtrusive manner. All lighting plans, whether for safety or aesthetics, must be submitted for approval by CLV Planning and Development.

(a) Street lighting and installation shall conform to the City of Las Vegas standards.

(b) Area lighting shall be provided along all public and private streets. Light standards and pole heights shall be scaled to the street dimension illumination requirements as per code. See appendix

(c) Hidden source lighting is required. Lamp sources shall not be visible or obtrusive into any neighboring area as per code.

(d) Pedestrian areas, including off-street trails, pathways, parks and other public areas, shall be illuminated during the hours of darkness.

(e) Task lighting shall be installed to emphasize major project entry signage and selected landscape features.

(f) Grade changes involving ramps or steps in major public areas shall be lighted. Lighting in these areas shall be provided by low overhead fixtures (<16' height) and/or bollard lighting especially on commercial properties.

(g) Outdoor recreational facilities shall be illuminated when feasible or permissible. The lighting design for these facilities shall have a minimal impact on adjoining properties. See CLV Zoning Ordinance.

(h) All pedestrian underpasses shall have lighting fixtures to illuminate the areas during darkness.

3.11 Site Drainage: An attractively designed drainage system with adequate capacity to

handle runoff of heavy rains is critical in maintaining the desired appearance in the Lone Mountain Master Development Plan area.

(a) Conceptual design details of the Gilmore Open Space/ Drainage Facility and the Gowan/ Lone Mtn system- branch 2 shall be prepared upon completion of flow study and in conjunction with the CLV and the development phasing plan.
(b) The design objective for drainage improvements is to provide safe, efficient, and non-detrimental storm drainage. All areas of a project must be designed to prevent ponding unless detention is required. The drainage plan includes major drainage concepts and underground facilities. Each parcel shall adhere to the drainage plan.
(c) Downspouts shall be internally routed and have a continuous paved path to the storm drain system for all commercial properties.
(d) All roof overflow drain openings on commercial buildings shall require a cover piece at the rooftop level, if overflow drains are not used.

3.12 Site Grading: Proper site and building design will minimize required grading by corresponding with the natural lay of the land. The design objectives for parcel grading are to create smooth slope transitions between grade changes, to integrate buildings and site improvements, and to encourage the use of land form grading as a landscape design element. In addition:

(a) Graded slopes shall meet the standards established by the City of Las Vegas.
(b) Grading and drainage design shall provide for adequate site drainage. All parcel drainage shall conform to the approved Master Drainage Plan.
(c) The grading of the site shall conform as closely as possible to the natural topography. Transitions shall be as smooth, gradual and incremental as possible, recognizing existing slope conditions. Where topographic constraints exist, use architectural design solutions, such as low walls.
(d) Tops and toes of slopes shall be rounded, and fall lines shall be varied, to create natural-appearing changes in grade unless a rigid transition is a deliberate part of the site development design concept.
(e) Grading large, flat building pads on sloping sites shall be avoided wherever possible. The architecture shall be designed to work with the grade by using smaller building pads with more frequent and smaller transitions in grade.
(f) Building pads shall be set to promote positive drainage around the structure. All erosion slopes shall be landscaped with trees, shrubs, ground cover, and rock mulch in accordance with the approved plant palette, or mulched with approved landscaping rock, and/or a combination of planting and mulch. The maximum slope for such areas is 2:1. An exception may be granted, subject to review, for use of retaining wall system noted below.
(g) Grading shall be manipulated to allow for a maximum of three feet, six inches (3'-6") retaining wall height. Terracing, with a minimum of four feet (4'-0") clear horizontal separation between walls, is required to mitigate the needed retaining wall height. The maximum slope for planted areas is 3:1.
(h) A retaining system that combines planting pockets with soil retention to achieve a steeper slope is an acceptable alternative to the above under certain

circumstances.

(i) Positive landscape drainage behind the backs of curbs shall be provided to minimize surface and irrigation run-off.

(j) Retaining walls immediately adjacent to or connecting with a building shall be constructed of a material that visually blends with the building exterior, or is an integral material in the landscape. All retaining walls require waterproofing treatment that consists of asphalt waterproofing along with a strip drain seepage barrier, as well as weep holes, crushed rock or perforated pipe drainage.

(k) Grading shall be contained within parcel property lines. No cutting, filling, nor any other earthwork disturbances from construction may overlap onto adjacent properties unless specific written approval is granted by both the affected parcel owner(s).

(l) Erosion control and fugitive dust control are required. Grading activity shall closely correspond with the start of construction; water and soil stabilization techniques shall be used during grading activity; and top dressing and/or planting of disturbed areas shall be completed within thirty days of final grading completion.

(m) Completed landscaping of individual lots and graded areas is required within 30 days of a certificate of occupancy granted by the City.

3.13 Utilities: The design intent for utilities is to incorporate utility distribution systems in a visually unobtrusive manner.

(a) Excluding electrical transmission lines (optional), utilities shall be located underground.

(b) Utility fixtures, such as transformers, underground, traffic control pedestals, irrigation controllers, and fire protection assemblies (except hydrants) shall be set back from the public right-of-way and screened from view when possible outside of sight triangle.

(c) Utility easements shall be provided under the street or sidewalk section and, where required, alongside the street right-of-way.

(d) Installation and maintenance of utilities shall avoid disrupting paving, landscaping, and off-site utilities.

(e) Telephone and electricity may be installed overhead, temporarily, during construction only.

3.14 Easements: Easements are restrictions placed on parcels to provide for a specific use, such as the service of a public utility line or drainage system. Structures, walls, fences, and landscape, etc. Erected structures within easements may be subject to removal at the expense of the parcel owner, if requested by the easement holder.

3.14.1 The **Kern River Pipeline** crosses the Lone Mountain Master Development Plan area in a generally northeast to southwest direction. Open space and/or roadway Right-of-Way has been planned to run over the length of the pipeline within the Plan area.

3.15 Mechanical Equipment: Mechanical equipment shall be incorporated in a visually

unobtrusive manner.

(a) Mechanical equipment and meters shall be integrated into the building or screened from public view as much as possible. Roof mounted mechanical equipment is not allowed on any residence.

(b) Electrical equipment shall be interior mounted wherever feasible. Exterior mechanical equipment, including utility meters, may not be placed on any lot without specific approval of the Committee. Conditions of approval will include side or rear location and screening from adjacent properties and public areas.

(c) For commercial buildings, roof mounted mechanical equipment must be concealed by a parapet wall or screen, and not visible from adjacent properties.

(d) For commercial buildings, all backflow preventers, including fire sprinkler backflow preventers and above ground utility connections, shall be screened by walls and/or landscaping.

(e) Approximate locations of this equipment shall be indicated on plans submitted for review.

3.16 Construction Activities: Good housekeeping practices at construction sites are critical to maintaining an attractive marketing image. Trash and debris can easily become a nuisance because of the frequency of winds. Therefore:

(a) Owners and builders shall clean up all construction site trash and debris at the end of each working day, and remove and properly dispose of trash and debris each week from the construction site.

(b) The builder shall install temporary chain link fencing around the perimeter of commercial parcels to contain construction debris. Lightweight materials, packaging, and similar material shall be constrained from blowing off the site.

(c) Concrete truck chutes must be washed in the parcel developer's on-site concrete washing area. The owner/builder must protect drainage ways, storm drainage structures, and other sensitive site features from concrete waste. Washing trucks into storm drainage systems, adjacent parcels, or open space is prohibited.

(d) The parcel developer shall protect from damage all existing pavement, and remove from paved areas all mud deposits left by construction equipment.

(e) The parcel developer shall locate and protect existing underground utilities prior to construction. The developer is responsible for repair and restoration of all existing improvements damaged by construction activity, including, but not limited to, walls, landscape, paving, signage, and utilities.

(f) The owner shall maintain all buildings and improvements in good condition, and repair and adequately paint or finish when required.

(g) The owner shall maintain all landscape materials in the parcel in a neat and attractive condition, to include proper watering, fertilizing, pruning, maintenance, and replacement of all dead or dying plant materials.

(h) The parcel developer shall be responsible for fencing all existing plant material to be preserved or natural areas designated for protection, prior to the start of construction.

(I) The location and appearance of any construction trailer and related facilities must be maintained in an acceptable manner. These structures shall be removed promptly upon completion of construction.

4. ARCHITECTURE AND LANDSCAPE OVERVIEW

4.1 Objectives

4.1.1 The intent of the Design Standards is to:

(a) define a minimum standard of quality for the design of buildings and landscape in the Lone Mountain Master Development Plan area,

(b) establish a consistent design character for the Lone Mountain area, and

(c) ensure compatibility within the Lone Mountain Plan area, and between it and the Northwest.

4.1.2 Good architectural and landscape design is closely associated with good site planning, the guidelines for which are provided in the previous section. Because guidelines are conceptual, latitude in interpretation within the defined theme is necessary; however, the CLV will not approve designs that appear arbitrary or inconsistent with the guidelines.

4.2 Architectural Themes: The architectural theme for Lone Mountain residential projects will be derived from Southwest Contemporary, Mission, or Italian Renaissance. The commercial areas, village and neighborhood commercial, will also be designed to be integrated into the overall feel of the PCD using the same elements as the residential areas. In the transitional areas between commercial and residential development, the commercial areas shall employ the design elements of the residential in a simpler, more restrained way, scaled appropriately for the larger buildings, and with a modern influence. This blended style will be called Southwest Contemporary. See Appendix A for a description and typical characteristics of each style.

4.2.1 Design considerations shall be given to weather protection through the use of arcades, porticoes, canopies, awnings or other means including the use of fogging systems. Extending architectural lines into the landscape and defined spaces is encouraged as a means for enhancing architectural interest, continuity and the creation of livable spaces.

4.3 Landscape Architectural Concept

4.3.1 The landscape concept for the Lone Mountain Master Development Plan area shall be drought-tolerant, in order to conserve water. It is understood that coordination and some blending with the existing Northwest landscape is required to avoid a harsh interface of styles; however, the overall theme of the Lone Mountain area shall be water conserving. This shall be achieved through the use of basic xeriscape techniques such as the use of drought tolerant plant material and water efficient irrigation systems, and the design precepts which follow. Appendix B contains the approved Lone Mountain Plant Palette.

4.3.2 The landscape concept throughout Lone Mountain is based on Desert Southwest, California Mission, and Spanish/Moorish Garden. Industrial and Commercial areas, as well as Public areas, shall employ a more limited plant palette than the residential

areas. The landscape concept includes the following precepts:

(a) Limited use of turf, primarily for functional recreational areas. As a general guideline, total turf area shall be 50% or less of the total landscaped area. Extension of the architecture into the landscape in the form of low walls, *bancos* benches, portales, covered arcades, and usable outdoor patio areas with decorative paving, plantings, and shade.
(c) Limited use of water in small fountains.
(d) Sun protection provided by covered arcades, trellises, and/or shade trees.
(e) Extensive use of evergreen shrubs.
(f) Use of water-conserving, drought-tolerant, desert-adapted plant material.
(g) Zoning of plants by compatible water use, with the highest water use in areas where the colors and textures of foliage and flower can be most appreciated.
(h) Use of appropriate technology to achieve the most efficient irrigation systems, including drip irrigation wherever possible.
(I) Proper maintenance, including the best horticultural practices in pruning, irrigation, and fertilization of all plant material.
(j) Use of appropriate ground mulches.

4.3.3 **Planting Design**

(a) Plantings shall be designed to highlight building entries, define parcel edges, soften building masses, provide shade for pedestrian areas, and screen parking and service areas without impeding sight triangles.
(b) Achieve unity of design by repetition of certain plant varieties, such as street trees and massing of plants, and coordinate planting plans with adjacent properties.
(c) Limit the number of species to simplify the planting plan. Do not use a wide variety of species at random.
(d) Massing of plant material by species shall be sized in proportion to the landscaped area, adjoining architectural mass, and/or the adjoining paving area.
(e) Choose plant material and space appropriately for mature size, to conserve use. Avoid over-planting.
(f) Employ water-conservation principles in the design; for example, group together plants of like requirements for water, sun, and soil.
(g) The designer shall provide a maintenance program as part of the landscape design. If over-planting for immediate effect, provide a time table for thinning.
(h) Preserve and incorporate existing native vegetation wherever possible.
(I) For commercial properties a continuous planting strip, a minimum of seven feet (7') wide, shall be placed along all side and rear property lines, except where buildings occur in a zero lot line condition.
(j) City of Las Vegas Standards require 24" box trees be planted 30' on center maximum with requirements of tree quantities in parking lots. See CLV Landscpae, Wall, and Buffer Standards
(k) Recommended shrub size is five (5) gallon.
(l) Recommended ground cover size is one (1) gallon; additionalsmaller sizes allowable, subject to review.

(m) All turf shall be fescue blend or hybrid bermuda, developed for use in the desert. Common bermuda grass is prohibited. Astro-turf is prohibited.

(n) Reliance on excessive, large expanses of turf, except for recreational areas such as parks, is not permitted.

(o) All plant material shall be nursery grown, free of pests and diseases, of good form and habit, and represent the best qualities of the species.

(p) Plant material shall be installed in a manner commensurate with the best horticultural practices in the region to maximize the chances of plant survival.

(q) Inorganic materials shall occupy no more than forty percent (40%) of the total landscaped area after one year of growth. Bare soil is not permitted.

(r) Boulders and rock groupings shall be set in informal arrangements, and be buried at least one third (1/3) their depth, so that they appear more natural.

(s) Limit areas devoted to cobbles and gravel mulch. Neither multi-colored gravel nor white gravel will be permitted.

(t) Installation of landscaped areas must begin within 60 days of completion of construction.

4.4 Common Areas

A series of parks and open space trail systems shall be linked with the pedestrian pathway system through coordination of individual developer site plans. Neighborhood parks shall be built within residential communities to provide passive and active play areas as required by the City of Las Vegas Zoning Ordinance at 330 square feet per dwelling unit. These parks and open spaces are to be maintained by the homeowners associations.

The entry roadways that connect to the Gilmore Drainage and Open Space area are considered open space corridors with mini-pocket parks equipped with exercise stations or other applicable elements. The sidewalks along this system shall be six (6') feet minimum in width. The Gilmore Drainage and Open Space is to be maintained by the City of Las Vegas.

The main jogging and trail system will be incorporated into the streetscape system and will link to the Multi Purpose Trail System via the Gilmore Drainage and Open Space area and under the Beltway where both multi-purpose trail and drainage system co-exist.

This system shall also connect to the Lone Mountain Detention Park site and eventually to the Lone Mountain Trail Head Park at Jensen and Alexander. The Pathway System will also continue to the private school/church site near Gowan and "Jensen". The school/church site is also part of the park areas proposed along the abandoned Jensen alignment from Gowan to nearly Cheyenne.

4.5 Irrigation

4.5.1 The climate and soil conditions in Las Vegas Valley create a difficult environment for landscape plants. Therefore it is essential that the irrigation system utilize current

technology in both product application and the system design. The design objective is to create an irrigation system that is water-efficient, low-maintenance, and provides for the immediate and future requirements of the plant material.

4.5.2 Provide an automatic underground irrigation system for all landscaped areas. A centrally-controlled system is strongly encouraged.

4.5.3 Areas to be served by irrigation systems shall be evaluated for peak demand water requirements and estimated annual water usage. Designer shall utilize reference evapotranspiration rate data available from the Nevada Cooperative Extension weather station and apply the appropriate landscape coefficient to estimate water use.

4.5.4 Designer shall size and locate the water supply based on serving the calculated peak flow demand. A dedicated water tap, service, and meter are required for site landscape irrigation. All water is to be potable as provided by the local water purveyor, unless alternative sources are available. In no case shall velocities through service lines exceed seven feet per second (7 FPS) for piping two inches and smaller, and 5 FPS for piping 2.5 inches and larger. Flow through the landscape water meter shall not exceed 70% of maximum rated flow determined by the American Water Works Association (AWWA).

4.5.5 All potable water supplies shall be protected by the water district's standards using an approved Reduced Pressure Backflow Preventer (RP) device. At no time shall the velocity through the RP device exceed 7.5 FPS.

4.5.6 Design shall be based on utilizing available static pressure minus ten percent (10%) for fluctuations. Provide booster pump downstream of RP device if required to operate system within highest level of application efficiency. Include pressure loss calculations with plan submittal.

4.5.7 Provide head-to-head coverage for lawn areas. Heads shall pop-up a minimum of 2.5 inches.

4.5.8 Minimum width of lawn areas is ten feet with 2 feet swales on both sides.

4.5.9 Do not place spray heads adjacent to any wall or structure, CLV requires 24" away from building. If spray irrigation is desired adjacent to wall or structure, irrigate by subsurface means.

4.5.10 Design system for peak summertime irrigation to be completed between 4:00 a.m. and 12 noon, and turf areas to be able to accommodate every-other-day watering (will require well-prepared soil for deep rooting of turf).

4.5.11 Irrigation water runoff to the street is not permitted. Therefore, place spray heads 6" from back of curb (or edges of sidewalks) and provide positive drainage so that nuisance water will not flow over curbs and sidewalks or across vehicular drives.

4.5.12 Provide drip irrigation to shrubs and trees, with appropriate filtration and pressure regulating devices. Accommodate for adding emitters as trees mature.

4.5.13 Closely-spaced low growing ground covers and annuals may be irrigated by pop-up spray heads; no fixed risers are permitted.

4.5.14 Reliance on spray irrigation, where drip is practical, will not be permitted.

4.5.15 Install backflow preventer in expandable locking metal cage or similar enclosure. Screen the equipment and/or locate away from public view.

4.5.16 Provide an electric, solid state controller equipped with a master valve terminal and a minimum of two fully independent programs. If controller is installed outside, provide a weatherproof, locking enclosure.

4.5.17 Provide remote electric control valves in boxes with bolt-down covers; no manual valves are allowed.

4.5.18 Install a master electric control valve immediately downstream from each backflow preventer if foundation structure is present within irrigated area. The valve must be capable of fully opening under the lowest designed flow (usually for drip).

4.5.19 Install quick coupling valves in boxes with bolt-down covers at minimum 200' intervals, and at dead-ends of all mainline runs.

4.5.20 Provide individual-use sleeves under pavement for supply lines, non-pressure piping, and control wires.

4.5.21 Keep spray irrigation away from building foundation structures, sign faces, sidewalks, and parking lots.

4.5.22 Zone properly for plant material needs, including the consideration of exposure.

4.5.23 Screen the control system and/or locate away from public view.

5. DESIGN STANDARDS FOR NEIGHBORHOOD AND VILLAGE COMMERCIAL

See also Sections 3 and 4: Site Development Standards - General, and Architecture and Landscape Overview.

5.1 Definitions

(a) Neighborhood Commercial

The Neighborhood Commercial category addresses parcels of 5 acres or less and provides for the development of convenience retail shopping, services and professional office principally serving neighborhood needs, and compatible in scale, character and intensity with adjacent residential development.

(b) Village Commercial

The Village Commercial land use designation addresses parcels of 20 acres or more with a Gross Floor Area Ratio (GFAR) not to exceed .30 or 30% coverage allows low to medium intensity retail, office or other commercial uses that serve primarily local area patrons, and do not include more intense general commercial characteristics. Service Commercial is typically located on the periphery of residential neighborhoods and should be confined to the intersections of major arterials along major retail corridors.

5.2 Site Planning

The design intent is to create visually attractive, value-apparent, easily accessible projects within the Lone Mountain area. These standards shall mitigate negative impacts on surrounding areas through the use of setbacks, height limitations, walls, landscaping and grading, and appropriate building configurations.

5.2.1 **Site Grading:** Parcel grading shall create smooth slope transitions between grade changes, integrate buildings and site improvements, and encourage the use of land form grading as a landscape design element. Proposed grading schemes will be reviewed during the design review process.

5.2.2 **Site Coverage:** Gross site area is hereby defined as the area contained within the parcel lines. Building footprint coverage shall not exceed thirty percent (30%) of the gross site area. Parking structures are not included in calculating this coverage figure. Gross site area does include dedicated easements, landscape easements, and common areas.

5.2.3 **Building Placement and Orientation:** The orientation of a building or structure upon a site must reflect not only the project's functional needs, but also must be responsive to the individual parcel's characteristics and sensitive to adjacent land uses and the larger surrounding community. It is important that the three-dimensional character of each structure be considered as it relates to the specific parcel. These issues must be

skillfully addressed in order to obtain design review approval.

(a) Provide a well-defined building entry for pedestrians and vehicular traffic. Enhance entries and connections with landscaping, paving, and architectural elements to create a sense of arrival.

(b) For each project, provide a handicap-accessible pedestrian path from the sidewalk onto the site, and from the site and parking areas to the main building entry. Integrate into the site design all Federal ADA Standards and local public agency accessibility requirements.

(c) Establish a relationship between the site, each building and adjacent properties. Integrate site features that create a link to the building, to develop a sense of place in every project.

(d) FOR EXAMPLE: Define the entry area with enhanced paving, frame with special planters/plantings, trellised entry courts, and/or architectural building forms such as recesses and overhangs appropriate to the specifics of the site. Link building entry to the pedestrian pathway and walkway system. Provide linkages to allow connections by alternative means (bike, etc.) to the Multi-Purpose Trail System. Employees shall be encouraged to walk to work from public transportation links or be dropped off at the street sidewalk and walk into the site.

5.2.4 **Circulation:** Overall vehicular and pedestrian traffic must be effectively managed, and shall be addressed early in the design process.

(a) Site layouts must be designed to route people and vehicles within the site, and not be predicated merely on the required number of parking stalls. Clear, logical, and identifiable circulation paths shall be provided for both vehicles and pedestrians. Non-intuitive circulation schemes and lengthy dead-end parking arrangements will not be acceptable.

(b) Each project shall provide a direct pedestrian link onto the site from the pedestrian sidewalk, for each frontage.

(c) Incorporate loading, unloading, and passenger drop-off areas to the overall circulation design, and make such areas safe for pedestrians.

(d) Driveway entry throats shall be a minimum of thirty feet (30') in width; all vehicular aisles shall be a minimum of twenty-five (24') in width. Minimum per CLV standard drawing 222A.

(e) Circulation in parking areas shall be contained within the site, and shall not allow for vehicle short-cuts. Continuous parking lots meeting at property lines are encouraged.

(f) Integrate emergency vehicle access to the overall design.

5.2.5 **Parking**

The parking lot requirements shall be in conformance with the City of Las Vegas Zoning Ordinance.

5.2.6 **Service Areas**

(a) Service areas, docks, and truck loading areas shall be screened and located away from public view. Such areas shall be setback from residential property lines by a minimum of 34 feet.

(b) Screen outside storage areas from public view and other adjacent uses with a solid 6' tall masonry wall designed and finished to be compatible with the architectural character of the site.

(c) Screen all refuse areas with 6' tall masonry walls on three sides, and with a trellis or roof, finished to coordinate with the architectural character of the project.

(d) Enclosures shall have opaque doors on the remaining fourth side. Provide access from within the development to the refuse collection areas, so that such areas shall be accessible by service vehicles, but not be the focal point of a driveway or parking area.

(e) Design private drives to allow for easy access of service vehicles.

5.3 Architecture

The goal for the architecture in the office areas is to establish a high standard of quality and long-term value. Architectural design shall support the community theme, (see Appendix A) and be of appropriate scale and character, and commensurate with the surrounding developments. See also Section 4 - Architecture and Landscape Overview. Design review attention will be devoted to the consistent application of sound design and planning principles.

(a) All open space visible from a "main street" or public square or plaza shall be designed as public space in the form of pocket parks, plazas planters with seating.

(b) All design elements shall appear integrated with the overall project concept. Designs that appear arbitrary or are inconsistent in form will not be accepted.

(c) Detached structures and satellite buildings must be integrated with the overall project design. Pre-fabricated, temporary, or patchwork type constructions shall not be allowed on any portion of the site.

5.3.1 Height of Buildings and Structures

(a) The maximum total building height, as measured from the finish floor elevation of the ground floor, including parapets, roof-mounted equipment, penthouse, and screens, shall not exceed thirty-five feet (35') unless stepped back per CLV zoning ordinance.

(b) The height of ground-mounted structures and accessories such as flag poles, uninhabited towers, tanks, etc., may extend to a maximum of sixty (60').

5.3.2 Setback Requirements

As per the City of Las Vegas Zoning Ordinance.

5.3.3 **Building Massing and Form:** A relationship between site and building shall be firmly established. Site features that create a link to the building and develop a sense of

place must be integrated into every project. Appropriate examples include enhanced hardscape areas framed by special planters and plantings, entry courts, and employee patio areas. Inappropriate examples include a primary building entry served solely by a narrow sidewalk that can be reached only be walking between a row of parked cars.

(a) The CLV will favor visual continuity within multi-building projects, and within the context of adjacent projects.
(b) Building massing shall possess a balance in form and composition. Avoid large, flat, unarticulated building elevations, and long undifferentiated walls.
(c) Vertical supports such as columns, piers, and fins, shall be visually balanced with the loads they appear to carry.
(d) Fenestration must be carefully composed to complement a building's basic solid massing. Mullion patterns shall provide scale and modulation that relates to the overall building design.
(e) Develop a positive relationship between the building and the pedestrian. Design ground story facades to relate to the human scale. For example, break the facade into bays; provide signage and graphics appropriate to the pedestrian; extend the architecture into the landscape by use of arcades, porticoes and shade structures.

5.3.4 **Building Entry and Focal Points:** Primary building entries shall be emphasized by design features such as overhangs, recesses and roof forms that are integrated into the overall building design.

(a) Primary building entries should be obvious. A clearly defined primary pedestrian entry linking to an enhanced hardscaped foreground is required for each building.
(b) Enhance entries and connections with landscaping, paving, and architectural elements.
(c) To reinforce the building-to-site relationship, incorporate landscape features which visually and functionally complement the architectural design. This creates a link with the building and helps to develop a sense of place.
(d) Passenger pick-up and drop-off areas (auto courts) shall use accent trees and specialty paving to identify the entry areas.
(e) Use flowering trees and shrubs for accent and color.
(f) Use trees to provide shade for pedestrian areas. For focal points and other areas within thirty-five feet (35') of a primary building entry, the minimum size tree specimen shall be 24" box.
(g) Buildings shall cluster around pedestrian plazas and courts where possible, and pedestrian access shall be integrated into the overall design of facilities.

5.3.5 **Employee Patio Areas**

(a) Patio areas shall be integrated into the overall project design. Elements shall include landscaping, shade structures, seating, low walls, and enhanced specialty paving. Patio sizes and features shall be proportional to the project.
(b) Projects over 20,000 square feet of building area shall provide an on-site outdoor

employee patio area which is separate and removed from the main building entry and parking area.

(c) The patio area shall be readily accessible to all on-site users. In a single user project, the patio area shall be adjacent to or reasonably accessible to a side building entrance. In a multi-user project, the patio area shall be centrally located, or more than one patio shall be provided.

5.3.6 Building Materials, Colors, and Finishes

(a) Exterior materials selected for a building must be consistently applied and linked throughout a project; e.g., if a building is faced in a veneer of brick or tile, this feature shall in some manner turn the corner or wrap the building.

(b) Preferred construction material is masonry, or tilt-up concrete. Other methods are allowed, subject to CLV design review.

(c) Wood may be used as an accent material only, not as the primary building cladding. All wood must be finished with paint.

(d) Monolithic glazing may be used in special applications such as an accent to the overall design, but not as a singular design theme. Unarticulated "glass box" design will not be allowed because of its obtrusive reflectivity.

(e) Lightly tinted or clear glazing is expected for ground floor retail; however, heat load gain must be considered. Untinted mirrored glass, gold-tinted mirrored glass, and opaque-appearing (black) glass will not be allowed.

(f) Building color selection, and its relationship to the surrounding environment and adjacent properties, will be critically evaluated in design review. White, off-white, and gray-white colors are discouraged unless used for a specific reason and in small areas onlyotherwise the colors are to be equivalent to the surrounding product.

(g) A minimum of ten(10) percent contrasting material or color is required on commercial buildings. Glazing is to constitute twenty(20) percent at the ground floor.

5.3.7 Roof Design

(a) Most office or commercial projects in the Lone Mountain Master Development area will feature parapet-screened, built-up flat roof forms. Sloped, curved or other roof forms may be used if expressed as a design element and consistently applied. Special purpose roof systems such as tensile structures are acceptable as long as they are well-integrated into the project design.

(b) Built-up roofing systems shall be effectively screened on all sides by the building parapet. Parapet height must equal or exceed the height of the highest point of the built-up roof and rooftop equipment.

(c) The CLV shall allow limited use of flat roofs with parapet and roof-mounted mechanical equipment.

5.3.8 Mechanical Equipment Screening

(a) Exterior components, whether roof or ground mounted, shall be screened on all

sides by a screening device such as a screen wall or parapet wall that shall be aesthetically compatible with the architectural design of the building.

(b) Screening of the tops of roof-mounted equipment that will be visible from upper levels of an adjacent building may be required, depending upon the project location and adjacent uses.

(c) Minimum screening height shall be the height of the screened exterior components, and shall effectively screen all equipment from view from within 500 feet.

(d) Equipment screening shall occur as monolithic units rather than individual smaller units. Multiple individual equipment screen "hats" surrounding individual elements will not be allowed.

(e) Extruded metal screens, or screens of the same material or cladding as the building and directly linked to the building form, are appropriate screen examples. Wood, expanded metal lath, and chain link are not acceptable.

(f) Roof access ladders shall be located on buildings so as to be internal to the site, and not visible from the street.

5.4 Signage

All signage and graphics and their lighting shall be complimentary to the overall project design and consistent throughout the project. The signs shall be designed for effective advertising as well as for developing visually balanced and appealing identification within the Lone Mountain Master Development Plan area.

5.4.1 The CLV has the specific right to refuse approval of any sign design which does not conform to the criteria. Proposed signage must also be compatible with that of the Las Vegas Sign Code. Where differences exist, the more specific and more restrictive shall apply.

5.4.2 All property owners/tenants shall be required to submit the proposed sign design for approval to the CLV. Special design considerations and unique layouts are encouraged and shall be subject to approval by the CLV .

5.4.3 **Signage Not Allowed.** No sign, awning, canopy, advertising, or any other item such as decoration, lettering or advertising on the glass of any window or door, or within 48" of any interior/exterior window, will be allowed without written approval from the CLV. If approval is granted, the owner agrees to maintain such item in good condition and repair at all times.

5.4.4 In addition, the following types of signage are not allowed:

(a) SIGN CONSTITUTING A TRAFFIC HAZARD. No person shall install, maintain, or cause to be installed or maintained, any sign which simulates or imitates in size, color, lettering, or design, any traffic sign or signal, or which uses the words "STOP", "LOOK", "DANGER", or any other words, phrases, symbols, or characters in such a manner as to interfere with, mislead, or confuse traffic.

(b) IMMORAL OR PROHIBITED. No person shall exhibit, post, or display on any sign, or cause to be exhibited, posted, or displayed upon any sign, anything of an obscene, indecent, or immoral nature or unlawful activity (per City Code).

(c) SIGNS, DOORS, WINDOWS, OR FIRE ESCAPES. No window signs will be permitted except otherwise noted in this document. No sign shall be installed, relocated, or maintained so as to prevent free ingress to or egress from any door. No sign shall be installed which conceals or covers exit signs. No sign shall be attached to a stand pipe except those signs that are required by code or ordinance.

(d) ANIMATED, AUDIBLE MESSAGE, OR MOVING SIGNS. Signs that have parts that move, swing, or rotate, or have lights that flash, blink, or fluctuate, or are otherwise animated or scintillating, are prohibited.

(e) OFF-PREMISE SIGNS. Any sign, other than owner-installed directional, that is installed for the purpose of advertising a project, event, person, or subject not related to the premises upon which the sign is located, shall be prohibited.

(f) VEHICLE SIGNS. Signs which are on or affixed to trucks, automobiles, trailers or other vehicles which advertise, identify, or provide direction to a use or activity not related to its lawful making of deliveries of sales or merchandise or rendering of services from such vehicles, are prohibited (per City code).

(g) LIGHT BULB STRINGS AND EXPOSED TUBING. External displays which consist of unshielded light bulbs, or open, exposed neon or gaseous light tubing, are prohibited. An exception may be granted by the CLV when the display is an integral part of the design character of the activity to which it relates. Temporary decorative holiday lighting may be installed only with written approval from the CLV.

5.5 Lighting

A carefully conceived architectural lighting scheme is required for each project.

(a) Emphasize building entries and hardscape forecourts with lighting.

(b) Fixtures shall be complimentary to the overall project design and consistent throughout the project.

(c) All fixtures in public areas shall be vandal- and tamper-resistant. Low mounted access panels shall require tools to open.

(d) Fixtures under twenty feet (20') in height shall have rock guards, and lenses shall be shatter resistant polycarbonate or other substance.

(e) For architectural lighting, metal halide, halogen, and fluorescent light sources are acceptable for use on-site throughout the project.

(f) "Wall-pack" type fixtures are limited to service area use; where allowed, they shall be down-lights with reduced glare, or have minimally exposed light sources.

(g) Horizontal illumination shall be kept to a minimum.

(h) Uniformity ratios, vertical illumination levels, and fixture cut-off levels shall meet or exceed IES recommendations.

(I) Fixtures shall not be placed to produce glare or significantly cast onto adjoining lots or streets. Light cast onto adjacent properties shall not exceed 0.02 foot candles.

(j) Outdoor lighting shall not be powered beyond 240V.
(k) Globe type fixtures with exposed lighting sources are not allowed.
(l) Cobra heads are not allowed.
(m) Themed lighting should be consistent with entire planned area.

5.5.1 **Parking and Public Area Lighting:** The fixture type shall be from the Quality Lighting line, or approved equivalent.

5.5.2 Luminaires used for drive aisles and parking areas shall be pole-mounted. Pole heights shall be between 15 and 36 feet. Pole height shall be determined so as not to exceed the height of adjacent buildings.

5.5.3 **Covered Parking Area Lighting:** Luminaires for covered parking areas shall be recessed, with tamper-proof trims and hardware. Lenses shall be 5/8" polycarbonate or 1/2" laminate riot glass with 3/8" tempered glass. Finish shall be durable architectural paint or surface treatment. Lamps shall be high pressure sodium or fluorescent. Light sources shall be hidden from street view (no "wall-pack" type fixtures or fixtures with exposed sources of light).

5.5.4 **Low Level Lighting:** Bollards, beacons, and wall-mounted low level fixtures serve primarily as accent lighting and to provide safety lighting at steps, ramps, and structures. They are not intended for use as area lighting.

5.5.5 **Landscape and Accent Lighting:** Accent lighting for landscape and site features shall be provided by grade-mounted flood lights or housing-below-grade uplight.

5.6 Landscape

The goal of the landscape design is to help develop a project identity while contributing to a pleasant and attractive environment. The landscape will give structure and image to the overall development, while providing orientation, shade, and comfort for individual areas.

5.6.1 **Landscape Concept:** Plant material shall be selected from the Plant Palette in Appendix B. (See also Section 4 - Architecture and Landscape overview)

5.6.2 **Parkway and Service Drive Frontage:** Walls or fences are not required along the Parkway or Beltway in the Lone Mountain Master Development Plan area because of the berm design. Should this berm disappear in the future due to construction or development of the Parkway/Beltway, the wall requirement shall replace the berm. An edge consisting solely of landscaping (must be low water using and drought tolerant) is appropriate. A low(<30") wall or open fence, or a combination of low wall and fence, may be used in conjunction with the landscaping. There is no required setback for the wall/fence beyond the edge of the Service Drive right-of-way. See the CLV Zoning Ordinance for the minimum building setback.

5.6.3 The density and maintenance requirements of plant materials shall be in planned zones, with low-maintenance, drought-tolerant plants along natural open areas and

more formal and intensively maintained areas near building entrances and other areas of higher use, such as public plazas, courtyards, and pedestrian walkways.

5.6.4 **General Requirements:** A minimum of fifteen percent (15%) of the total parcel area shall be landscaped. The landscape will include plant (organic) materials as well as inorganic elements such as rock mulch, boulders, etc. The proportion of organic material which comprises the total landscaped area shall range from forty to sixty percent (40-60%) after one year of growth. Also see the CLV Landscape, Wall and Buffer Guidelines

5.6.5 **Landscape Grading and Drainage:** See also Section 3, Site Planning Standards, Site Grading.

5.6.6 **Parking and Vehicular Areas:** Parking and vehicular circulation areas can detract from a project's appearance if not properly designed. Parking lots and vehicle circulation spaces shall be designed to blend with the building site character through the use of landscape planting and grading. See the CLV Landscape, Wall, and Buffer guidelines

6. DESIGN STANDARDS FOR SINGLE AND MULTI-FAMILY RESIDENTIAL

See also Section 3 and 4: Site Planning Standards - General Requirements, and Architecture and Landscape Overview.

6.1 Definitions

(a) Low Density

For the purpose of these Standards, Low Density shall consist of a variety of detached, single-family homes with attached or detached garages and a density of no greater than 5.5 dwelling units per acre. These include conventional single-family, patio homes and Z-lot configurations.

(b) Medium-Low Density

For the purpose of these Standards, Medium-Low Density shall consist of a variety of detached, or attached, single-family homes with attached or detached garages and a density of no greater than eight (8) dwelling units per acre. These include conventional single-family, patio homes and Z-lot configurations.

(c) Medium-Low Attached

For the purpose of these Standards, the Medium-Low Density Attached shall be townhomes in the form of quadriplexes with detached garages or detached one and two story residential dwelling units, with a density of no greater than twelve (12) dwelling units per acre. Units may be detached at similar densities.

(d) Medium Density

For the purpose of these Standards, the Medium Density shall be with optional detached garages with a density of no greater than eighteen (18) dwelling units per acre and shall not exceed three stories in height.

6.2 Site Planning

The design objective is to provide community and open space amenities that promote pedestrian and vehicular access for a pleasant living environment. The development shall include central recreation and landscape amenities for residents.

6.2.1 **Street Layout and Appearance:** The design objective for single-family projects is to design streets that are aesthetically pleasing and provide efficient traffic flow. Adherence to the following is required:

(a) To create a visual variety and interest and avoid a "tunnel" effect, curvilinear streets offset the width of the ROW are encouraged in single-family areas.

(b) A variety of front residential setbacks should be encouraged to create interest and articulation along the streetscene.
(c) Various garage orientations and configurations are encouraged to add interest and reduce the visual impact of garage doors on overall street appearance.
(d) One and two story elements should be utilized to add interest and variety to the building massing, when viewed from the streets.
(e) Driveway should be perpendicular to the street.

6.2.2 **Building and Lot Orientation:** The orientation of single-family lots and dwellings should focus on creating interesting and inviting streetscenes; usable private yards areas; and optimizing open space, recreational and view opportunities.

(a) Double frontage lots are prohibited.
(b) A variety of residential and garage orientations and setbacks should be employed to add visual interest to the streetscene.
(c) Along the collector and arterial roadways, some side-on orientations add variety to the building massing and opportunities to open perimeter walls. These openings provide visual and pedestrian access and additional landscape opportunities.
(d) Where appropriate, swing-in or side entry arrangements will be encouraged to create visual interest and variety to the streetscene.
(e) For those lots adjacent to the Gilmore Drainage and Open Space area, and separated by a road, dwelling units may be oriented to present a front elevation/front yard to the GD/OS system.
(f) Where third car garages are being proposed, a tandem configuration for the third car could be considered, to add flexibility to the floor plan and reduce the visual dominance of garage doors along the street.
(g) The orientation of multi-family lots and dwellings should focus on creating interesting and inviting streetscenes; usable private yards areas; and optimizing open space, recreational and view opportunities while minimizing parking on periphery of project.

6.2.3 **Parking:** Automobile parking and on-site circulation, if improperly treated, can degrade the visual quality and integrity of the neighborhood, therefore:

A. **Single Family**

(a) Resident parking is prohibited on major and minor arterial level streets and discouraged on any other street, drive or other place not specifically approved for automobile parking.
(b) The project association may restrict vehicular parking on any private street within the development. The project association shall be responsible for signage and enforcement of parking restrictions.
(c) Each single-family unit shall have a minimum of two enclosed off-street parking spaces.
(d) Trucks, campers, mobile homes or other recreational or off-street vehicles may not be parked in any front of fences or corner yards and shall not be parked,

maintained, constructed or repaired in any yard unless substantially screened from public view.

(e) Incorporate landscaping into parking and hardscape areas to break expanses of pavement and provide visual, heat and glare relief.

B. **Multi-Family**

(a) All circulation within common parking areas shall be internal to the site.
(b) The total site design concept shall include the integration of parking areas so that such areas do not dominate the site, and are dispersed throughout the site.
(c) Incorporate landscaping into parking areas to break expanses of pavement and provide visual, heat and glare relief.
(d) Covered parking structures shall be compatible with other architectural elements on the site.
(e) Parking lot lighting shall provide adequate illumination, but not emit light beyond the parking lot area.
(f) Parking lot design shall incorporate pedestrian circulation within and among parcels.

6.2.4 **Common Open Space and Residential Amenities:** A minimum of 330 square feet per dwelling unit shall be allocated to open space for each project site. A walkway system with jogging path runs within LMMDP area, and shall connect with the neighboring residential parcels. Developments within Lone Mountain shall provide amenities to integrate with the system; for example, pedestrian walkways with access gates linking to the trail system and adjacent uses such as common open space areas, the community parks, and commercial areas. Parcels adjacent to the GDC/OS system shall provide pedestrian linkage.

6.3 Architecture

Although the primary design components of any building are massing and scale, the following components require careful consideration to ensure compatibility in the overall appearance.

6.3.1 **Building Massing, Setbacks and Height Requirements:**

(a) The buildings shall have simple forms with combinations of one- and two-story elements.
(b) Front porches, arcades and second floor loggias are encouraged.
(c) There shall be articulation in wall planes both vertically and horizontally, with projections and recesses providing shadow and depth on front elevation only.

6.3.2 **Elevations and Floor Plans:** Builders shall provide sufficient variations to add visual interest to the street scene:

(a) Diversity of elevations is encouraged. It is recommend that no more than 4 identical elevations shall occur in a row along any street.

(b) Provide a minimum of two color schemes which can be applied to any elevation. Each color scheme shall have a dominant and accent color.
(c) Single story units or single story elements are encouraged at corner lots and lots adjacent to open space areas.
(d) For homes that are visible from public areas or streets, shall provide articulation and detail to the visible elevations from the street that is comparable to the front elevation.
(e) Design second story elements and locate windows to maintain rear and side yard privacy between units, where possible.
(f) Vary the floor plans on adjacent lots, use reverse plans, and alternate elevations, where practical.
(g) Multi-family projects shall provide a color scheme that can be applied to any elevation.

6.3.3 **Roofs:** Roof forms and materials are critical in maintaining the theme. Acceptable roof forms include gable, hip, or shed, and in some instances, flat (1/4" per foot slope) with parapet. Simple pitched roof forms may range from 3 1/2:12 to 5:12. Fascia shall be wood or stucco. Acceptable roof materials include two-piece barrel or S-shaped concrete or clay tile; terne metal or copper; and built-up or single-ply membrane (flat roof only). Skylights and solar panels are permitted provided they are suitably integrated into the roof design. Multi-family projects mechanical equipment should be behind project walls and visible asphalt shingles are not allowed. Roof mounted mechanical equipment is prohibited.

6.3.4 **Chimneys:** Fireplace chimneys shall be simple in design, massive in proportion, and use the same materials as the surrounding wall or accent materials. Exposed flues are not permitted. Split vent metal flues shall be covered, and shall not exceed 1'6" in height above the highest point of the attached structure.

6.3.5 **Exterior Materials:** The exterior finishes shall reflect the theme and be compatible with the surroundings. Acceptable finishes include:

(a) Plaster or stucco using a sand, dash, medium lace, or other light-textured finish.
(b) Exposed wood with a minimum 2" nominal dimension, of clear, all heart, kiln-dried material or glulaminated members with wood species and adhesive materials rated for desert climate. Exposed sheathing shall be limited to the underside of exposed eaves or porch roofs. All wood shall receive stain or paint finish. Durable substitute materials such as painted polymer aluminum, metal, or fiberglass, are recommended.
(c) Accents and trim of ceramic tile, brick, cast or real stone.
(d) Flashing, sheet metal, vents, etc., except for decorative copper, shall be painted to match adjacent surfaces.

6.3.6 **Colors:** Base colors shall be earth tones and warm off-whites (excluding pink) with contrasting accents. Any color change must occur on an inside corner only or separated by a horizontal cornice or accent band. Developer of the parcel shall submit

a color scheme for approval by the CLV. It should be noted that desert reflectivity is reduced with darker hues of colors and is encouraged.

6.3.7 **Lighting:** Each residence shall have, in addition to a porch light, a garage-mounted photo cell light that illuminates the street numbers. Bright security lights are prohibited.

6.3.8 **Windows and Doors:** Mill finish aluminum window or door frames are prohibited. Reflective glass is prohibited.

(a) WINDOWS, regardless of elevation:

- divided lights and factory finished white or accent color frames encouraged.
- half round or flat arched openings encouraged.
- accent windows, octagonal or circular, encouraged.
- shutters and pot shelves, scaled to the window size, encouraged.
- use of fiberglass or polymer wood substitutes recommended for shutters.

(b) EXTERIOR DOORWAYS:

- shall be sheltered by overhangs.
- shall be emphasized by door surrounds (i.e. "pop outs" on front doors)
- have the appearance of raised panels.

(c) GARAGE DOORS:

- shall be recessed from the adjacent walls.
- shall be metal sectional.
- decorative glass panels encouraged.

6.3.9 **Porches:** Porches provide shade and shelter, are conducive to neighborliness and the enjoyment of the outdoors. The porch also lends shadow and depth to the exterior walls and presents a human scale element to the street. Front porches and patios are encouraged.

6.3.10 **Balconies:** The use of balconies is strongly encouraged. The balcony shall be incorporated into the building form to provide articulation and visual interest to large wall masses. The railings shall be consistent in character and detail with the structure. Multi-family balcony railings shall be opaque.

6.3.11 **Columns:** Columns and arches are an important element in both Italian Renaissance and Mission architecture. They can be expressed as freestanding supports for porches or roofs or as attached pilasters to enhance depth and interest at windows and entries. Columns may be square or cylindrical, of various textures stucco, precast concrete, stone, or cast polymers finished to have the look of cement. Columns shall have both capital and base either through precast elements or by the application of stucco trim. Arches shall have a minimum thickness of twelve inches, and be half round, flattened or rectangular.

6.3.12 **Exterior Stairs:** Exterior stairs shall compliment the architectural massing and form of the building, and shall use materials similar to that of the balcony.

6.3.13 **Private Walls and Fences:** Private walls and fences are encouraged to provide security, privacy and landscape definition.

(a) Block wall treatments visible from the interior street or public spaces shall be consistent in design with adjacent buildings in materials, form, character, and color.
(b) Walls shall meet governing codes.
(c) Landscaping, particularly vines and espaliered plant materials, shall be used to visually soften garden walls.
(d) Stepped or arcaded walls are encouraged.
(e) To create a massive appearance, minimum thickness of walls shall be eight inches, or four to six inches with pilasters of eight-inches or greater.
(f) Natural tinted block walls are encouraged.
(g) Fences and view segments in private walls shall be of wrought iron, painted aluminum, polymer or precast baluster rails, or stacked and permanently fixed roofing tiles to form a grille. Gates shall be of wrought iron or painted aluminum.

6.3.14 **Accessory Structures**

(a) Patio covers, trellis', gazebos or any other accessory structures shall be compatible with the materials, forms and colors of the adjacent homes and shall be constructed as permitted by governing codes, particularly in respect to height, size and setbacks.
(b) Mailboxes shall be placed in and detailed to contribute to the overall community theme, as per United States Post Office specifications.

6.4 Landscape

The developer shall provide a landscape concept to establish continuity with the streetscape design.

(a) The landscape concepts will be subject to approval by the CLV
(b) Plant materials shall be selected from the approved Plant Palette. See Appendix B.
(c) Provide a minimum of one (1) 24" box tree per single-family unit front yard.
(d) The front yard planting shall be designed so that a minimum of 60% coverage is achieved within two years under normal growing conditions. This includes shrubs, turf, and vegetative ground covers.
(e) Plantings shall be a minimum of 5 gallon size, adequately spaced to provide full screen after two years' growth.
(f) An appropriate rock mulch, such as decomposed granite, shale, etc., shall be used in shrub beds, and shall be of earth tone (non-white).
(g) Provide landscaping for front and side yards of corner lots.

6.4.1 **Perimeter Area Landscaping**

Perimeter Area Landscaping shall be in accordance with CLV Landscape, Wall, and Buffer Guidelines.

6.4.2 **Irrigation:** All planting areas held in common and maintained by a project association or property management group shall be supplied with an automatic irrigation system. Individual lots are the responsibility of the homeowner. Common area greenbelts and streetscapes shall use, if available, reclaimed water under the Reclaimed Water Management Plan approved by the State of Nevada. All other areas will use potable water.

7. DESIGN STANDARDS FOR PUBLIC FACILITIES / OPEN SPACE

Public facilities and open space are an integral component to the Land Use Plan which utilizes streets, sidewalks and pathways to connect parcels to each other and encourage pedestrian activity. The Common Area is made up of the components listed below. All open space and public facilities are to be designed by City of Las Vegas standards. See Figure 15 - Open Space.

The Park-Residential Construction tax allows for collection of whichever is less, one (1) percent of the valuation of each building permit issued, or $1,000.00 per residential unit. The bases of valuation is $.32 per square foot. An "in lieu of" program is also allowed, whereby 330 square feet of open space is provided by the developer in lieu of payment. Either program is acceptable. If the Parks Dept is to build the park/ open space the land is to be located in the Lone Mountain Development Plan area.

7.1 School/Church

A school is currently planned within to the Lone Mountain Master Development Plan area and shall be built according to Clark County School District standards. A shared private school/church site is also proposed at Gowan and Hualapai.

7.2 Parks and Open Space

A series of parks and open space trail systems shall be linked with the pedestrian pathway system through coordination of individual developer site plans. Neighborhood parks shall be built within residential communities to provide passive and active play areas as required by the City of Las Vegas Zoning Ordinance at 330 square feet per dwelling unit.

(a) Neighborhood Parks of less than 5 acres in size - Designed to City of Las Vegas standards.

(b) City Parks of 5 acres or larger (up to 25 acres) - Designed as per City of Las Vegas standards.

7.3 Common Areas and Open Space

The Common Area is a series of small outdoor activity exercise areas that are linked by a continuous network of walkways and pathways designed and built by the developer.

The entry roadways,"loop road" that connect to the Gilmore Drainage and Open Space area are considered open space corridors with multiple mini-pocket parks, some equipped with exercise stations. The walkways along this system shall be six (6') feet minimum in width. The "loop road" open space as well as the pocket parks will be maintained by the Home Owner Associations. The Gilmore Drainage and Open Space and the Lone Mountain Park is to be maintained by the City of Las Vegas Parks Department after ownership transfer.

In order to qualify for Open Space allocation, the activity areas and sidewalk and pathway network must be approved by the City of Las Vegas.

7.4 Gilmore Drainage/ Open Space System and Gowan/ Lone Mtn System-Branch 2

The GDC/OS system, which is a regional drainage facility, is a linear parcel running downhill from West to East in which storm waters will travel but normally will serve as Open Space with landscape and hardscape improvements. GLMSB2 is also a proposed regional drainage facility as presented in the Clark County Regional Flood Control District 1997 Master Plan Update. Revision to the method of conveyance will be identified in the Master Drainage Study (Appendix E). Plans for maintenance funding are being developed by the property owners and the City of Las Vegas.

The main jogging and trail system along GDC/ OS will be incorporated into the streetscape system and will link to the Multi Purpose Trail System via the Gilmore Drainage and Open Space area and under the Beltway where both trail and drainage system co-exist.

This system shall also connect to the Lone Mountain Detention Park site and eventually to the Lone Mountain Preservation Park at Jensen and Alexander. The Pathway System will also continue to the private school/church site near Gowan and "Jensen". The school/church site is also part of the park areas proposed along the abandoned Jensen alignment from Gowan to nearly Cheyenne.

7.5 Lone Mountain Park

Lone Mountain Park is the termination of the open space system and the beginning of the multi-purpose regional trail system. Future plans for this park will be incorporated into these standards.

7.6 Developer Funding of Parks and Open Space

Prior to the start of construction of each phase, the Developer will enter into an agreement with City of Las Vegas Parks and Leisure Activities. This agreement will be for the application of their Residential Park Impact Fees to fund the construction of the parks and open spaces contained within the master plan.

Figure 15 - OPEN SPACE

9. GLOSSARY

BUILDER / DEVELOPER
"Builder/Developer" shall mean a developer/builder of an individual parcel other than the master developer and home builders.

CITY OF LAS VEGAS
City of Las Vegas (CLV) includes, but is not limited to the Planning Department, Development Department, Public Works, or any other Department that would review the Lone Mountain PCD design Standards and/ or plans.

COMMUNITY OPEN SPACE
Community open space is defined as any improved public recreational facility or grounds including but not limited to: park areas provided for passive recreation including gardens, walking areas, picnic areas. Linear open space connections were developed to provide pedestrian and bicycle linkages between village centers, neighborhood focuses, parks and residential areas. These connections can make dual use of preserved natural drainage, new drainage ways and utility easements.

CURB RAMP
A sloping walkway, which provides access between a walkway to a surface located above or below an adjacent curb face.

DESIGN THEME
A conceptual theme that is established for an area of the Lone Mountain which forms the basis for all design decisions that are made toward realizing the final form or the area. The Design Theme provides a visual basis for architecture, engineering, site planning and landscape architecture.

DRAINAGE WAY
A drainage channel or swale that serves to carry surface run-off.

HANDICAPPED ACCESSIBLE
Means of access and egress that are easily utilized by people having temporary activity, or mobility impairments, as defined by ADA.

LANDSCAPE
An outdoor area that is improved with one, or a combination of, ground cover, shrubbery, trees, water features, sculptures, earth berms, walls, or fences, based on a design that maximizes function, aesthetics and maintenance considerations.

LANDSCAPE AREA
A tract of land, usually adjacent to street right of way that is provided for the purpose of community landscape.

LANDSCAPE BUFFER
An area of land landscaped with earthforms and plant materials for the purpose of minimizing adverse effects of smoke, odor, noise, dust, glare or visual pollution form incompatible adjacent uses.

NEIGHBORHOOD
The neighborhood as a development concept applied to the Lone Mountain promotes the combination of residential, commercial, religious, educational and recreational facilities into a balanced land use development pattern. This pattern balances the number of residential units with appropriately sized, easily accessible levels of commercial uses and community facilities.

ON-SITE
Within the boundary of the development parcel or development site referenced.

PARCEL
A parcel of land, established by the primary developer, to be developed according to a specific program and planning and design criteria.

PARCEL DESIGN AND ENGINEERING CRITERIA
Documents that provide planning, site design and engineering criteria specifically for an individual development parcel.

PEDESTRIAN ACCESS CUL-DE-SAC
A cul-de-sac that provides pedestrian circulation through the end of the cul-de-sac to connect with walkways along streets, parks, public open areas or other cul-de-sacs.

RAMP
A portion of a handicapped accessible walkway with a slope greater than 1 foot vertical in 20 feet horizontal (5%).

RESIDENTIAL WALLS
Walls adjoining residential lots that are constructed to provide privacy for the residential parcel, and are not required to be constructed according to Lone Mountain wall standards.

SERVICE AREAS AND YARDS
Areas required to provide loading facilities and storage of waste products and trash at commercial buildings, offices, community faculties or residential projects.

SETBACK - BUILDING
The distance between the property line of a lot and the closest point on the exterior face of a building. In the proximity of streets, building setbacks shall be measured from the edge of the landscape area adjacent to the street. Parts of a building such as cantilevered eaves, decks, or bay windows may encroach into the setback.

SETBACK - PARKING
The distance between the property line of a lot and the back curb of a parking area.

SIGNAGE
Any device, structure, fixture or placard using graphics, symbols and/or written copy for the primary purpose of identification or advertising any establishment, product, goods or services.

SITE FURNISHING
Utilitarian outdoor elements intended for public use such as benches, trash receptacles, public telephones, newspaper dispensers, postal delivery units and lighting standards.

STREETSCAPE
All of the plant material, walkways, walls, street furnishings, and building facades adjacent to a roadway that establish the visual character of the public street.

WALKWAY
Paved pedestrian connections or walkways designated as handicapped accessible should not exceed 5%.

WATER CONSERVING PLANT MATERIALS
Plant materials that may or may not require irrigation, but do so in a limited way, as opposed to exotic plant material that is not indigenous to the area and require large amounts of irrigation.

APPENDIX A: ARCHITECTURAL STYLES

Mission

Mission architecture combines the building patterns of the Pueblo Indians with Spanish Colonial design, incorporating Mediterranean influences. Mission style uses low pitched tile roofs, with hipped or gabled forms and wide overhanging eaves. Missions were commonly built around a central patio or garden, with extended building eaves creating a covered arcade supported by rounded arches. Clay tiled roofs, white, stucco walls, and colonnades, or covered walkways, are typical features.

Italian Renaissance

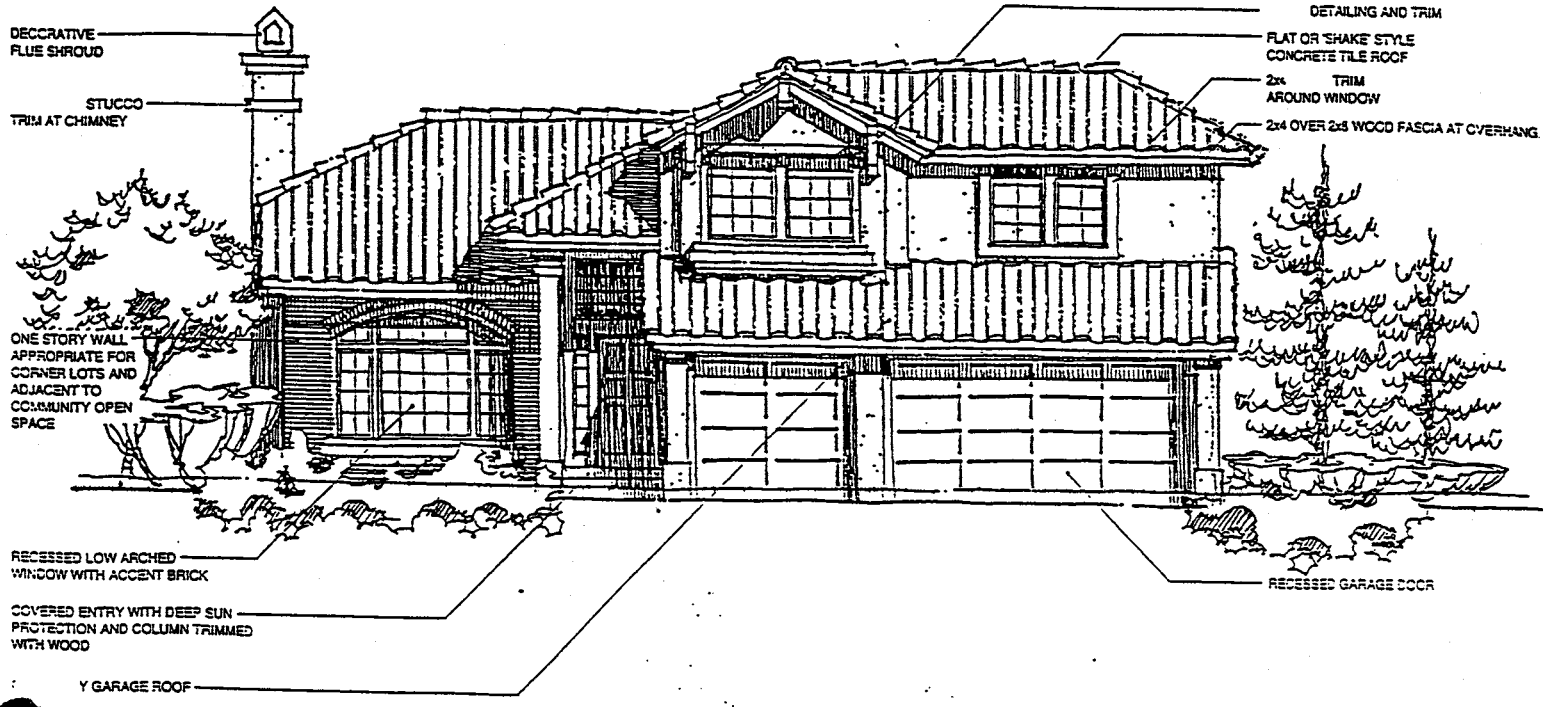
Aspects of Italian Renaissance architecture include classical elements such as columns, pediments, cornices, arches, and niches, with emphasis on overall symmetry of form. Roof forms are flat with a parapet, or hipped with a shallow slope. Balconies are projecting or recessed, with iron rails or concrete balustrades. Exteriors are masonry, frequently with lower story rustication.

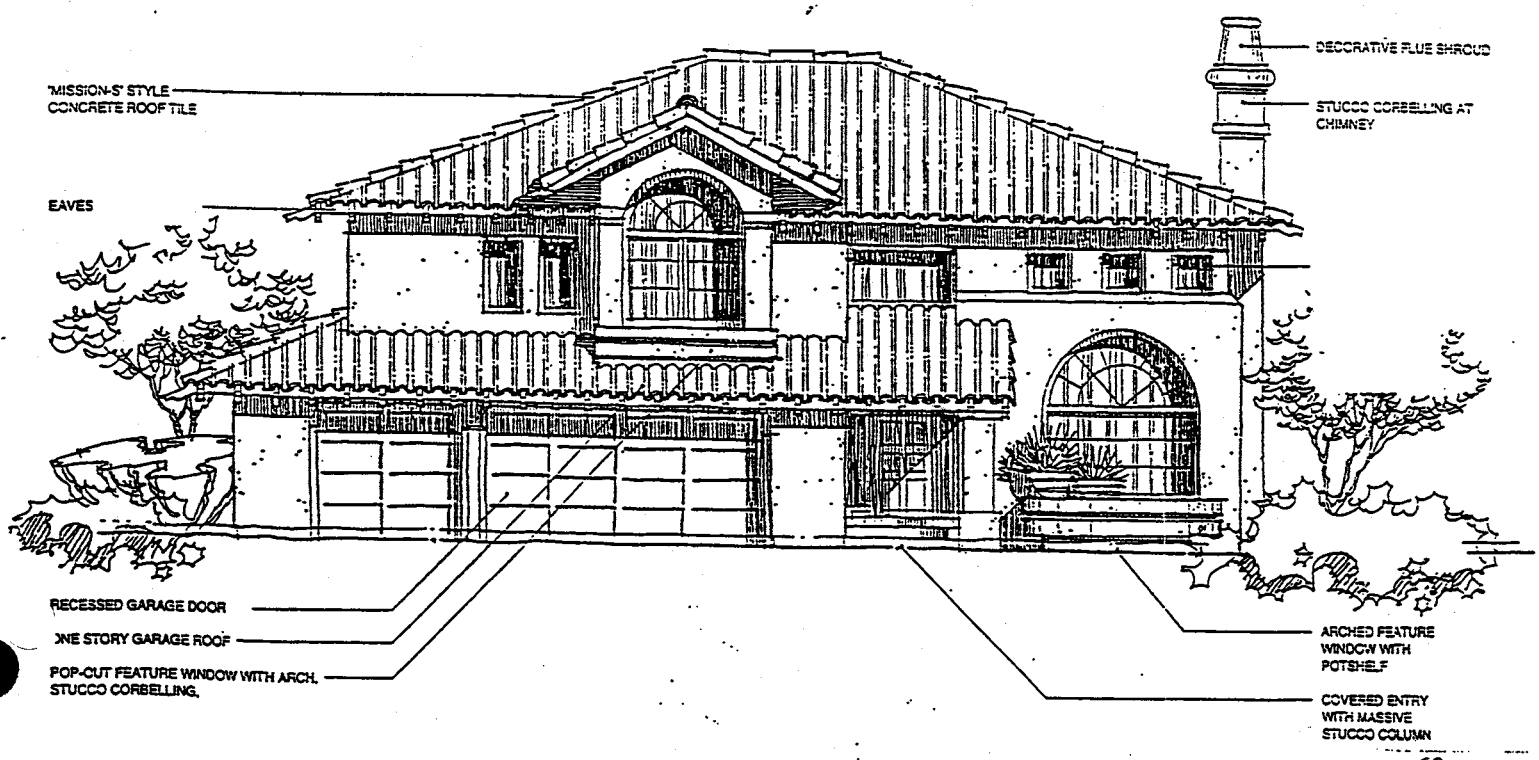
A brief list of typical characteristics of the residential style includes the following.

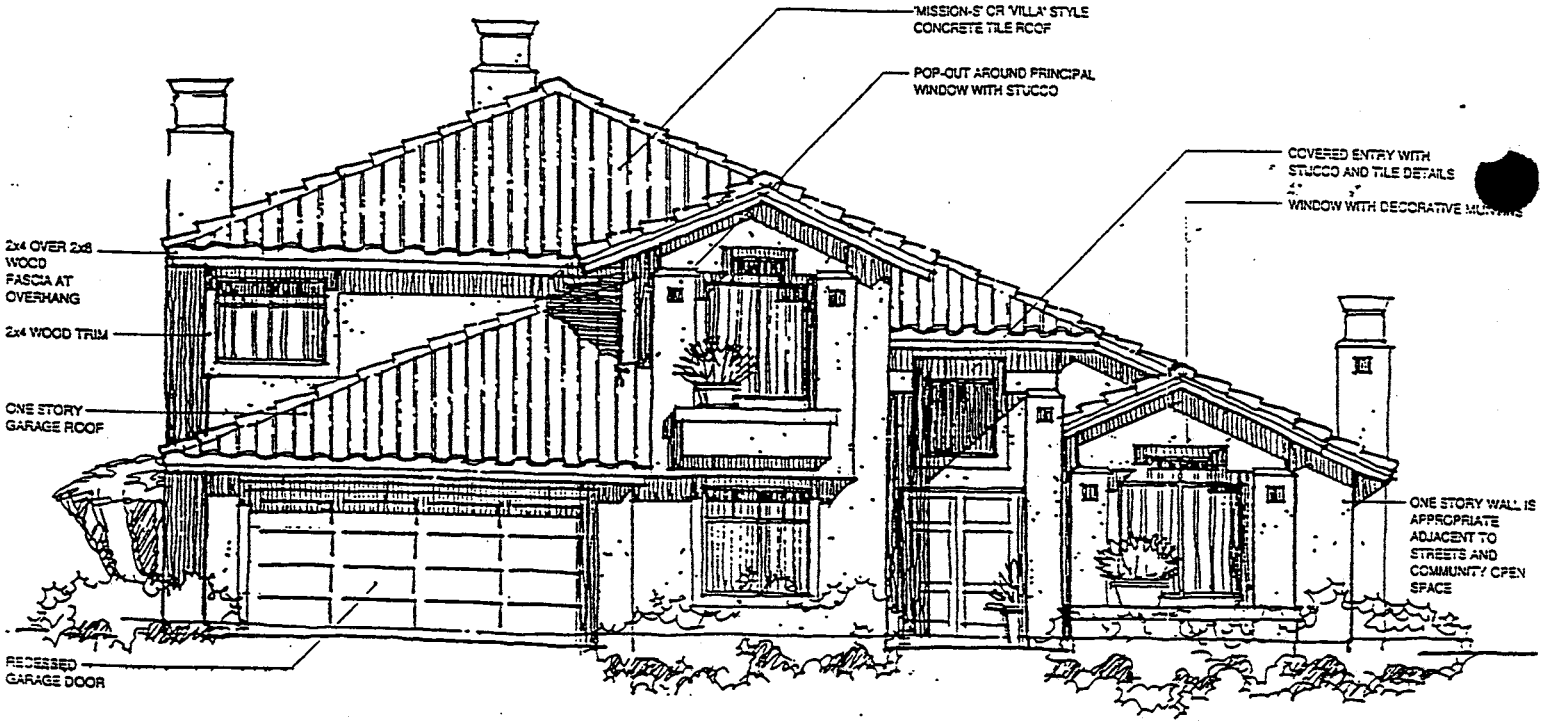
- Flat roofs with parapets.
- Shallow-pitched roofs with a slope of 3 1/2:12 to 5:12.
- Gable, shed and hip roof forms.
- S-shaped clay or concrete tile roofing.
- Smooth masonry exteriors.
- Generous overhangs with closed eaves; fascia and eave soffits of wood
- Half-round or flat arches above doors, windows and porch roofs.
- Entry accented by columns.
- Simple massing with projecting porches or wings.
- Balconies, projecting or recessed, with iron railing or concrete balustrade.
- Accent details such as shutters, medallions, quoins, tiled gables, molded cornices, window pediments, continuous belt course trim, and ground-story rustication.
- Exterior entry courts, courtyards, patios, and arcaded wing walls that are an extension of the architecture.

Southwest Contemporary

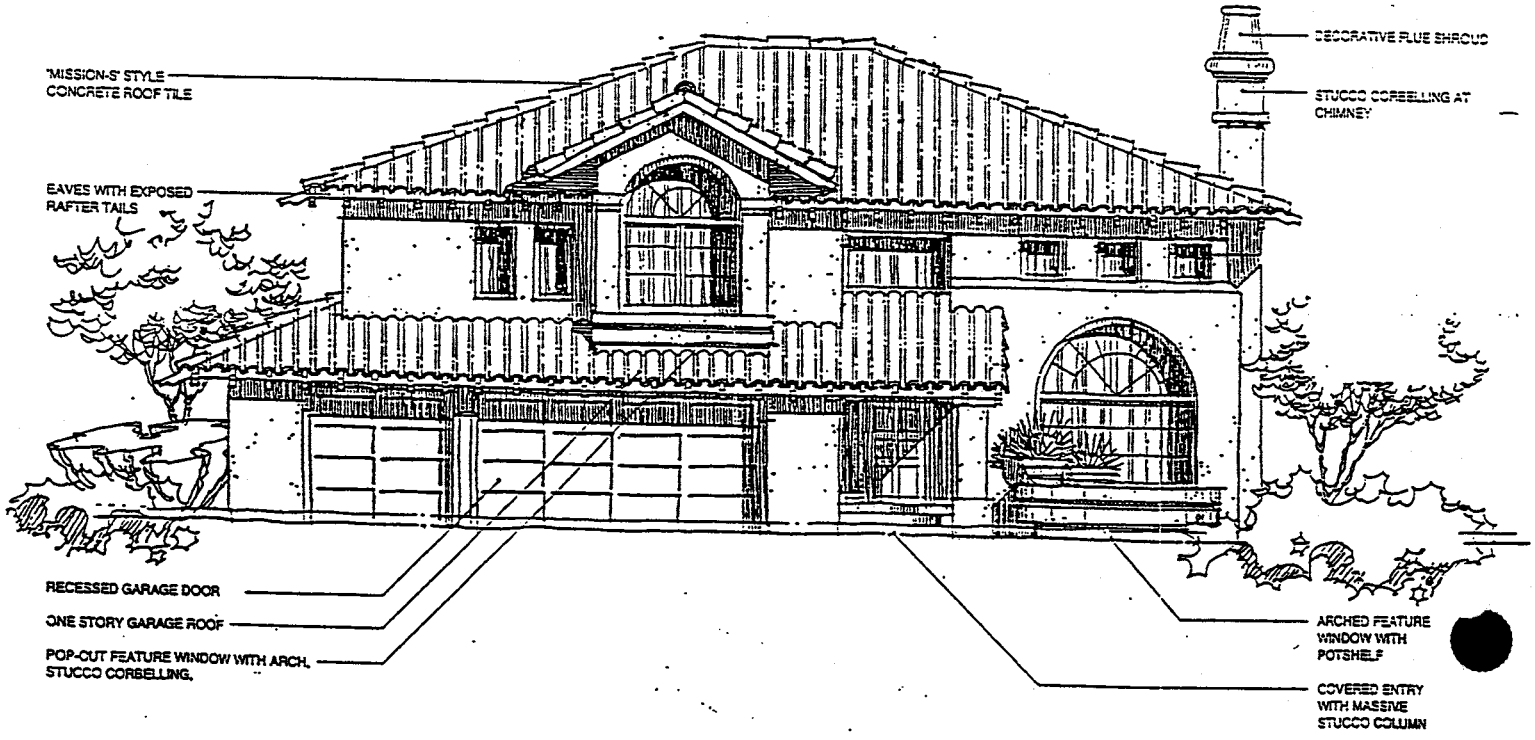
Retains the basic elements from Mission and Italian Renaissance - smooth finish stucco walls, clay roof tiles, arcades and courtyards with fountains, white and off-white to sand and coral exterior colors - but executed with cleaner lines, simplified forms and contemporary materials.


DECORATIVE FLUE SHROUD
STUCCO TRIM AT CHIMNEY
ONE STORY WALL APPROPRIATE FOR CORNER LOTS AND ADJACENT TO COMMUNITY OPEN SPACE
RECESSED LOW ARCHED WINDOW WITH ACCENT BRICK
COVERED ENTRY WITH DEEP SUN PROTECTION AND COLUMN TRIMMED WITH WOOD
Y GARAGE ROOF
DETAILING AND TRIM
FLAT OR 'SHAKE' STYLE CONCRETE TILE ROOF
2x4 TRIM AROUND WINDOW
2x4 OVER 2x8 WOOD FASCIA AT OVERHANG
RECESSED GARAGE DOOR


'MISSION-S' STYLE CONCRETE ROOF TILE
EAVES
RECESSED GARAGE DOOR
ONE STORY GARAGE ROOF
POP-OUT FEATURE WINDOW WITH ARCH, STUCCO CORBELLING,
DECORATIVE FLUE SHROUD
STUCCO CORBELLING AT CHIMNEY
ARCHED FEATURE WINDOW WITH POTSHELF
COVERED ENTRY WITH MASSIVE STUCCO COLUMN



Single Family Elevation - Contemporary Southwest



APPENDIX B

LONE MOUNTAIN PLANT PALETTE

TREES

	BOTANICAL NAME	COMMON NAME
1	*Acacia aneura*	Mulga
2	*Acacia greggii*	Catclaw acacia
3	*Acacia minuta*	Southwest sweet acacia
4	*Acacia rigidula*	Blackbrush acacia
5	*Acacia schaffneri*	Schaffner's acacia
6	*Acacia smallii*	Sweet acacia
7	*Albizia julibrissin*	Silk tree
8	*Arbutus unedo*	Strawberry tree
9	*Bauhinia congesta*	Anacacho orchid tree
10	*Brahea armata*	Mexican blue palm
11	*Cedrus atlantica 'Glauca'*	Blue atlas cedar
12	*Celtis reticulata*	Western hackberry
13	*Celtis sinensis*	Chinese hackberry
14	*Cercidium floridum*	Blue palo verde
15	*Cercidium microphyllum*	Littleleaf palo verde
16	*Chilopsis linearis*	Desert willow
17	*Chitalpa*	Chitalpa (*Chilopsis x Catalpa*)
18	*Cupressocyparis leylandii*	Leyland cypress
19	*Eriobotrya deflexa*	Bronze loquat
20	*Eriobotrya japonica*	Loquat
21	*Eriobotrya Rahpiolepis*	Coppertone
22	*Eucalyptus formanii*	Forman's eucalyptus
23	*Feijoa sellowiana*	Pineapple guava
24	*Fraxinus greggii*	Little leaf ash
25	*Fraxinus oxycarpa* 'Raywoodii'	Raywood ash
26	*Fraxinus velutina*	Arizona ash
27	*Fraxinus velutina* 'Modesto'	Modesto ash
28	*Fraxinus velutina* 'Rio Grande'	Rio Grande ash
29	*Gleditsia triacanthos inermis* cultivars	Honey locust
30	*Juniperus chinensis* 'Torulosa'	Hollywood twisted juniper
31	*Koelreuteria paniculata*	Goldenrain tree
32	*Lagerstroemia indica*	Crape myrtle
33	*Laurus nobilis*	Grecian laurel
34	*Ligustrum lucidum*	Glossy privet
35	*Olea europaea* 'Swan Hill'	Swan Hill Olive
36	*Olea europaea* 'Wilsonii'	Wilson's olive
37	*Phoenix dactylifera*	Date palm
38	*Pinus edulis*	Colorado pinyon pine
39	*Pinus eldarica*	Mondel pine
40	*Pinus halapensis*	Aleppo pine

LONE MOUNTAIN PLANT PALETTE

41	*Pinus pinea*	Italian stone pine
42	*Pinus roxburghii*	Chir pine
43	*Pistacia chinensis*	Chinese pistache
44	*Pithecellobium flexicaule*	Texas ebony
45	*Pittosporum phillyraioides*	Willow pittosporum
46	*Platanus acerfolia*	London plane tree
47	*Platanus wrightii*	Arizona sycamore
48	*Podocarpus macrophyllus*	Japanese yew pine
49	*Populus alba* 'Bolleana'	Bolleana white poplar
50	*Populus fremontii*	Fremont cottonwood
51	*Prosopis* species	Mesquite
52	*Prunus caroliniana*	Carolina laurel cherry
53	*Prunus cerasifera*	Purple leaf plum
54	*Punica granatum*	Pomegranate
55	*Pyrus calleryana* 'Bradford'	Bradford callery pear
56	*Pyrus kawakamii*	Evergreen pear
57	*Quercus buckleyi* 'Redrock'	Redrock oak
58	*Quercus ilex*	Holly oak
59	*Quercus suber*	Cork oak
60	*Quercus texana*	Texas red oak
61	*Quercus virginiana*	Southern live oak
62	*Quercus vierginina* 'Heritage'	Heritage live oak
63	*Robinia ambigua* 'Idahoensis'	Idaho locust
64	*Robinia ambigua* 'Purple Rose'	Purple robe locust
65	*Sophora japonica*	Japanese pagoda tree
66	*Sophora secundiflora*	Texas mountain laurel
67	*Ulmus parvifolia* 'Sempervirens'	Evergreen elm
68	*Vitex agnus-castus*	Chaste tree
69	*Zizyphus jujuba*	Chinese jujube

LONE MOUNTAIN PLANT PALETTE

SHRUBS

	BOTANICAL NAME	COMMON NAME
1	*Atriplex* species	Saltbush
2	*Baccharis pilularis* 'Twin Peaks'	Dwarf coyote bush
3	*Baccharis sarothroides*	Desert broom
4	*Cassis* species	Cassia and senna
5	*Cotoneaster* species and cultivars	Cotoneaster
6	*Dalea* species	Indigo bush
7	*Encelia farinosa*	Brittlebush
8	*Ericameria laricifolia*	Turpentine bush
9	*Euonymus* species	Euonymus
10	*Fallugia paradoxa*	Apache plume
11	*Feijoa sellowian*	Pineapple guava
12	*Ilex* species	Holly
13	*Juniperus* species	Juniper
14	*Lagerstroemia indica* cultivars	Crape myrtle
15	*Larrea tridentata*	Creosote
16	*Leucophyllum* species and cultivars	Texas ranger
17	*Ligustrum japonicum*	Japanese privet
18	*Ligustrumlucidum*	Glossy privet
19	*Myrtus communis*	Myrtle
20	*Myrtus communis* 'Compactus'	Dwarf myrtle
21	*Nandina domestica* cultivars	Heavenly bamboo
22	*Photinia fraseri*	Fraser's photinia
23	*Pittosporum tobira*	Mock orange
24	*Pittosporum tobira* 'Variegata'	Variegated mock orange
25	*Pittosporum tobira* 'Wheeler's Dwarf'	Dwarf mock orange
26	*Pyracantha* species	Pyracantha
27	*Rhaphiolelpis indica* cultivars	Indian hawthorn
28	*Rhus ovata*	Sugar bush
29	*Simmondsia chinensis*	Jojoba
30	*Tecoma stans angustata*	Yellow bells
31	*Vauquelinia californica*	Arizona rosewood
32	*Viburnum tinus*	Viburnum
33	*Viburnum tinus* 'Compacta'	Dwarf viburnum
34	*Xylosma congestum*	Xylosma

LONE MOUNTAIN PLANT PALETTE

SUBSHRUBS AND GROUND COVERS

	BOTANICAL NAME	COMMON NAME
1	*Abelia grandiflora*	Abelia
2	*Acacia redolens* 'Desert Carpet'	Prostrate acacia
3	*Aptenia cordifolia*	Hearts and flowers
4	*Baccharis* 'Centennial'	Centennial baccharis
5	*Baileya multiradiata*	Desert marigold
6	*Calliandra eriophylla*	Fairy duster
7	*Convolvulus cneorum*	Bush morning glory
8	*Convolvulus mauritanicus*	Ground morning glory
9	*Dietes iridoides*	Fortnight lily
10	*Gazania* species	Gazania
11	*Hemerocallis* species	Daylily
12	*Hymenoxys acaulis*	Angelita daisy
13	*Justicia* species	Justicia
14	*Lantana* species	Lantana
15	*Melampodium leucanthum*	Blackfoot daisy
16	*Osterospermum fruiticosum*	Trailing African daisy
17	*Psilostrophe cooperi*	Paperflower
18	*Rosmarinus officinalis* cultivars	Rosemary
19	*Salvia* species	Sage
20	*Santolina* species	Lavender cotton
21	*Sphaeralcea ambigua*	Globe mallow
22	*Teucrium* species	Germander
23	*Trachelospermum asiaticum*	Asiatic jasmine
24	*Trachelospermum jasminoides*	Star jasmine
25	*Verbena* species	Verbena
26	*Vinca minor*	Vinca

LONE MOUNTAIN PLANT PALETTE

ACCENTS, CACTI AND SUCCULENTS

	BOTANICAL NAME	COMMON NAME
1	*Agave* species	Agave
2	*Aloe* species	Aloe
3	*Brahea armata*	Mexican blue palm
4	*Caesalpinia*	Bird of paradise
5	*Chamaerops humilis*	Mediterranean fan palm
6	*Dasylirion wheeleri*	Desert spoon
7	*Echinocactus* species	Barrel cactus
8	*Echinocereus* species	Hedgehog cactus
9	*Ferocactus* species	Barrel cactus
10	*Fouquieria splendens*	Ocotillo
11	*Hesperaloe parviflora*	Red yucca
12	*Muhlenbergia* species	Muhley grass
13	*Nolina microcarpa*	Bear grass
14	*Opuntia* species	Prickly pear and cholla
15	*Penstemon* species	Penstemon
16	*Pennisetum setaceum* 'Rubric'	Ruby fountain grass
17	*Trachycarpus fortunei*	Windmill palm
18	*Washingtonia filifera*	California fan palm
19	*Washingtonia robusta*	Mexican fan palm
20	*Washingtonia filifera x robusta*	Hybrid fan palm
21	*Yucca* species	Yucca

VINES

	BOTANICAL NAME	COMMON NAME
1	*Campsis species*	Trumpet creeper
2	*Ficus pumila*	Creeping fig
3	*Gelsemium sempervirens*	Carolina jasmine
4	*Hedera species*	Ivy
5	*Jasminium mesneyi*	Primrose jasmine
6	*Lonicera species*	Honeysuckle
7	*Madfadyena unguis-cati*	Cat's claw
8	*Parthenocissus quinquefolia*	Virginia creeper
9	*Parthenocissus tricuspidata*	Boston ivy
10	*Rosa banksiae*	Bank's rose
11	*Trachelospermum asiaticium*	Asiatic jasmine
12	*Trachelospermum jasminoides*	Star jasmine

LONE MOUNTAIN PLANT PALETTE

PROHIBITED PLANTS

	BOTANICAL NAME	COMMON NAME
1	Cynodon dactylon	Common bermuda
2	Morus alba	Fruitless mulberry
3	Olea europaea	Olive tree
4	Nerium oleander	Oleander

NOTE 1: Each project shall coordinate its plant palette with existing street trees and landscape design concept.

NOTE 2: All other plants not listed on the Lone Mountain Plant Palette, but which are not expressly prohibited above, may be allowed subject to approval by the LMDRC.

NOTE 3: Not all species or cultivars of each genus listed will be allowed, depending on the suitability of the selected plant, with respect to its use of adaptability.

NOTE 4: For commercial and industrial applications, a limited number of species shall be used for the plant palette; whereas more latitude will be allowed for residential uses.

APPENDIX C

LEGAL DESCRIPTION OF PLANNED COMMUNITY DEVELOPMENT

PORTIONS OF SECTIONS I AND 12, T.20S. , R. 59S. , M. D. M. AND SECTION 7, T.20S., R.60E., M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

SECTION 1:

THE W 1 / 2 SE 1 / 4

EXCEPTING THEREFROM THE W 1 / 2 NW 1 / 4 NW 1 / 4 SE1 / 4 AND THE W 1 / 2 NW 1 / 4 SW 1 / 4 SE 1 / 4 AND THE SW 1 / 4 SW 1 / 4 SE 1 / 4 AND THE W 1 / 2 SE 1 / 4 SW 1 / 4 SE 1 / 4.

SECTION 12:

THE E 1 / 2

EXCEPTING THEREFROM THE W 1 / 2 NW 1 / 4 NE 1 / 4 AND THE W 1 / 2 NE 1 / 4 NW 1 / 4 NE 1 / 4 AND THE E 1 / 2 NW 1 / 4 NW 1 / 4 SE 1 / 4 AND THE W 1 / 2 SW 1 / 4 SE 1 / 4 SE 1 / 4.

THE SE 1 / 4 SW 1 / 4

EXCEPTING THEREFROM THE S 1 / 2 SW 1 / 4 SE 1 / 4 SW 1 / 4.

THE E 1 / 2 E 1 / 2 SW 1 / 4 SW 1 / 4

SECTION 7:

THE W 1 / 2 E 1 / 2 W 1 / 2

EXCEPTING THEREFROM THE E 1 / 2 NW 1 / 4 NE 1 / 4 SW 1 / 4.

GOVERNMENT LOTS 5, 7 THROUGH 20, 22 THROUGH 34

Barnson Survey, Inc.
2/3/97

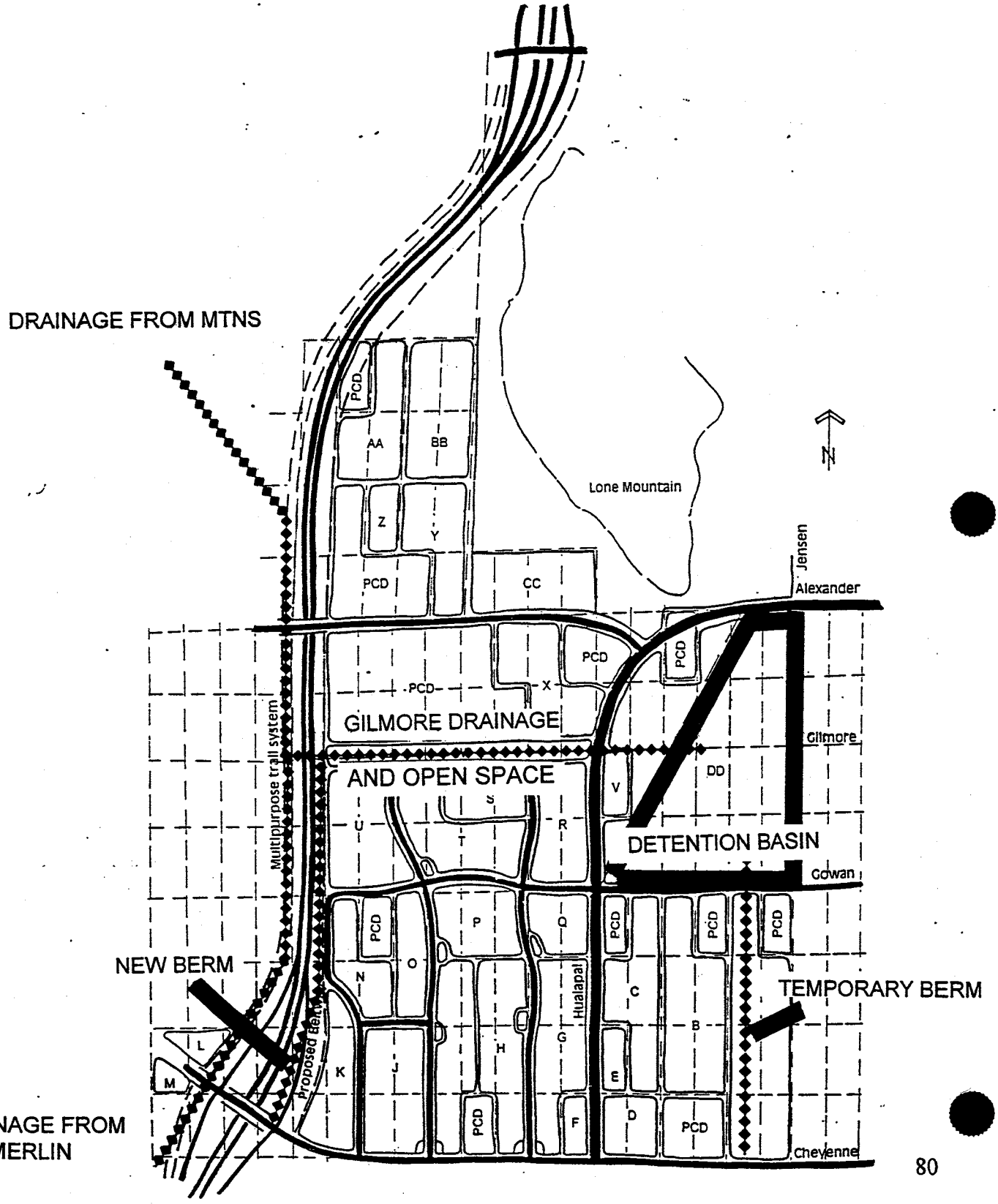
APPENDIX D TRAFFIC STUDY

APPENDIX E DRAINAGE STUDY

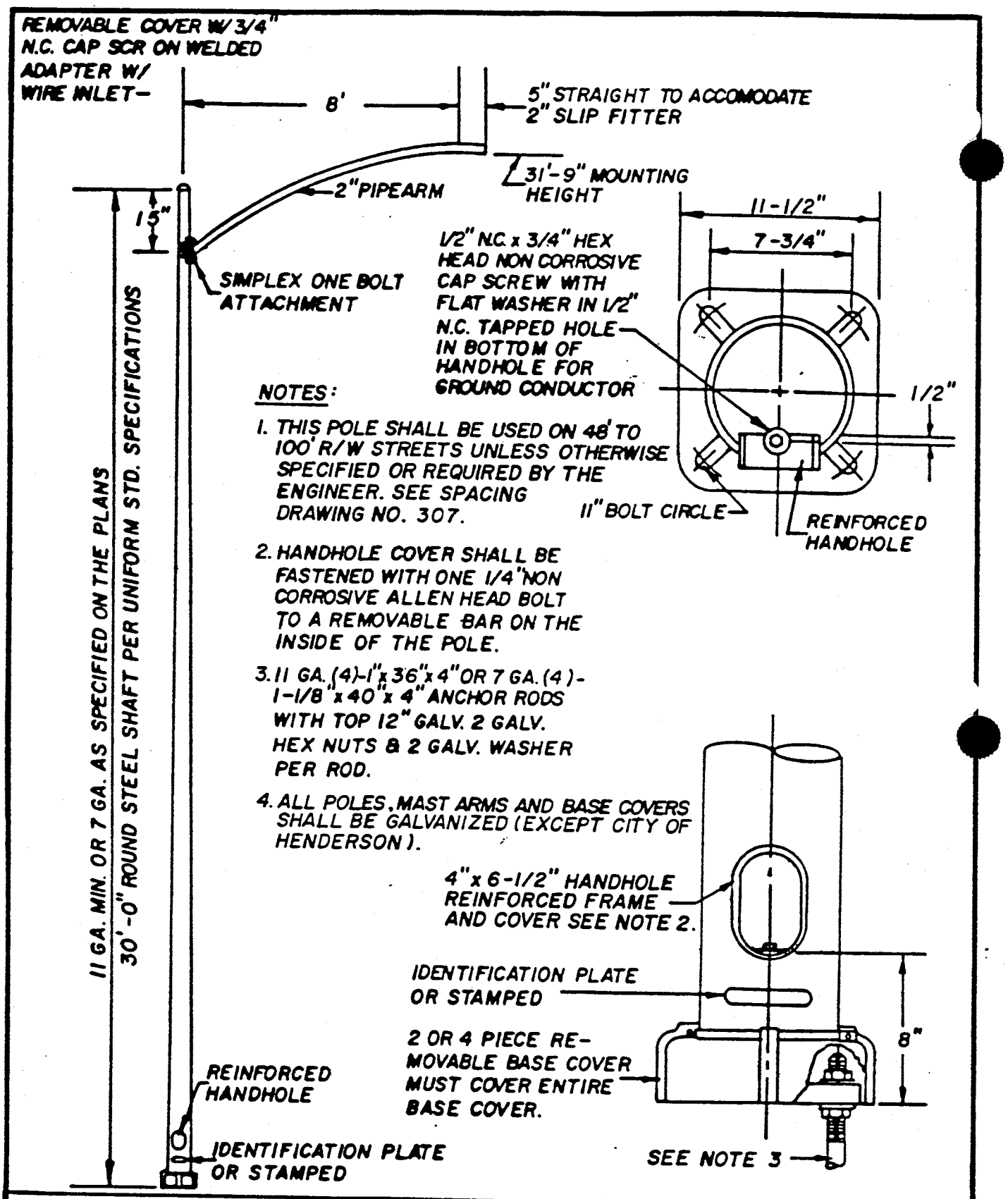
FIGURE 16-DRAINAGE MASTER PLAN

FIGURE 16-DRAINAGE MASTER PLAN

LONE MOUNTAIN PLANNED COMMUNITY DEVELOPMENT



APPENDIX F LIGHTING



SPECIFICATION REFERENCE	
506	STEEL STRUCTURES
623	TRAFFIC SIGNALS & STREET LIGHTING
715	GALVANIZING

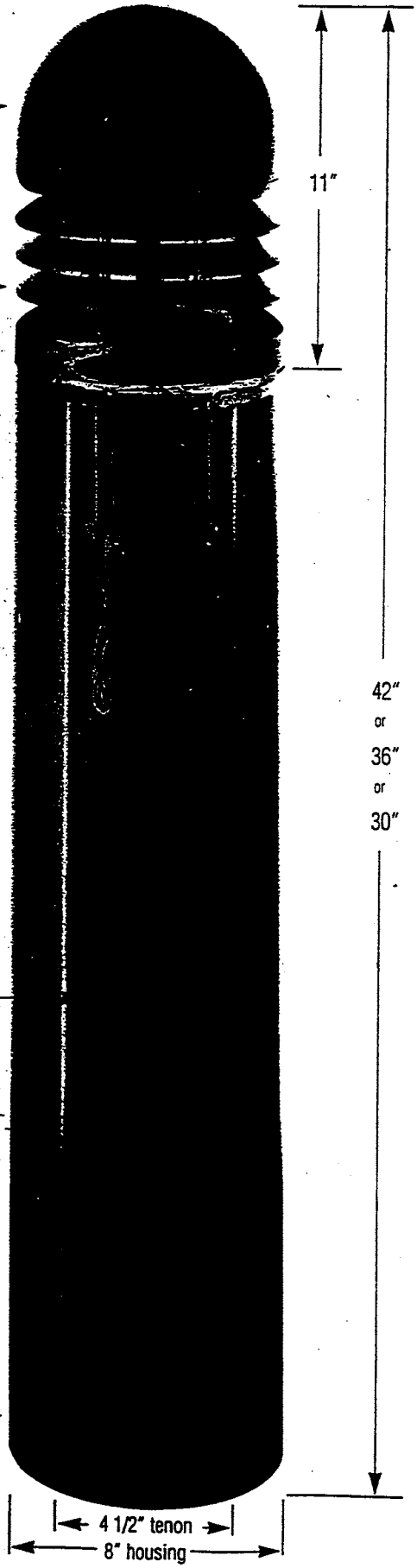
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STREET LIGHTING STANDARD WITH 2" PIPEARM

DATE	DWG NO. 309	PAGE NO. 68

GALVANIZED STEEL MOUNTING SYSTEM

BRM 822



In the **school yard**, bollards become objects for climbing on, hanging from, crashing into. Add the weathering effects of the elements and irregular maintenance and it's easy to see why there may be no more **punishing** environment for low level lighting.

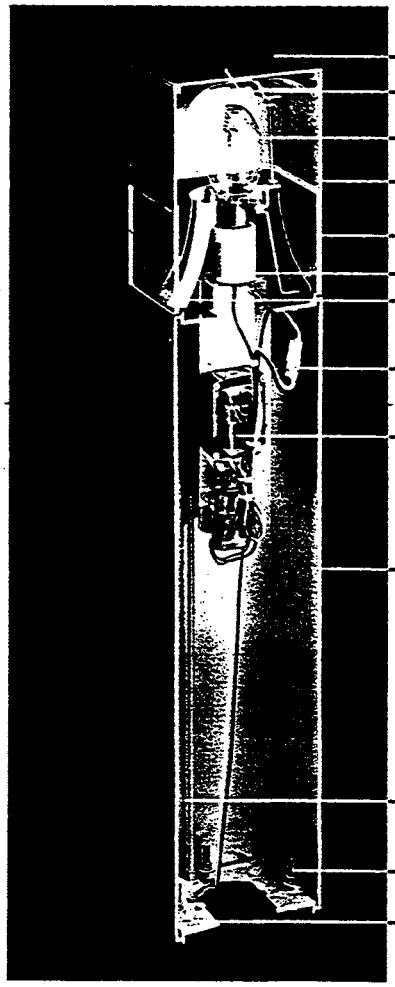
Gardco School Bollards are specifically designed and **field-tested** to meet the most extreme challenges kids can dish out. Their Gardco heritage assures optical perfor-mance

E M C O

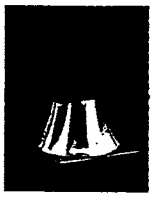
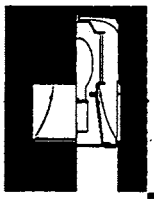
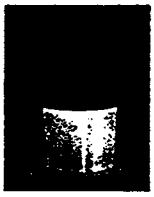
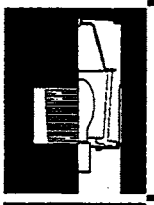
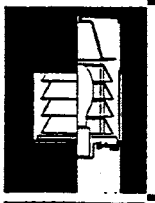
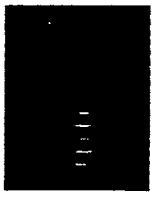
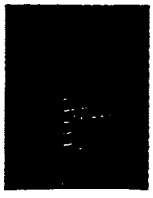
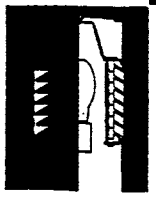
Bollards

In a low level lighting environment, a luminaire must address not only specific lighting criteria, but more importantly, the issues of vandalism, durability, and ease of maintenance.

EMCO's design philosophy exhibits an understanding and solution to these issues. In our line of bollards, you will find such features as seamless extruded housings, tamper resistant hardware, and silicone seals and gaskets to assure years of trouble free operation. By using basic geometric forms that blend well into the landscape, matched with a wide variety of optical systems, EMCO can provide a specific bollard to fit your particular project.

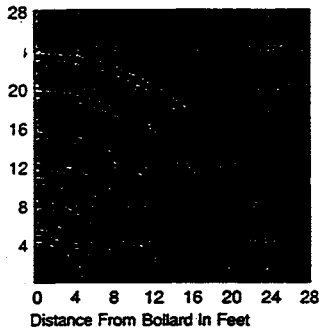


Optical Systems

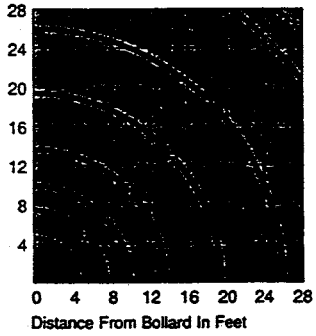
	Round	Square	Cross Section	
C				**Round Reflector** is cone-shaped specular Alzak® to project light outward in a 360° circle below eye level. Collecting reflector conceals light source and directs illumination to distributing Alzak® reflector. A clear acrylic window seals unit.
R				**Prismatic Glass Refractor** diffuses light and distributes it outward and downward with Type V distribution. Assembly is protected from the weather and vandals by a clear acrylic shield.
S				**Round Polished Aluminum Louvers** hide light source and direct light downward in a 360° circular pattern. A clear acrylic shield protects the system.
L				**Cast Louvers** conceal the light source while directing illumination outward and downward. Finished to match fixture. Glass cylinder mounted inside protects the lamp.

Photometrics

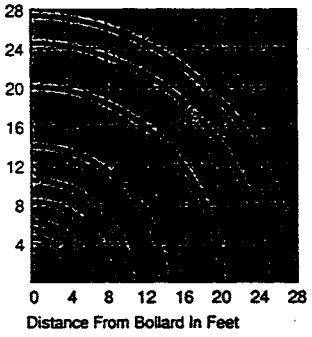
C-Round Cone Reflector



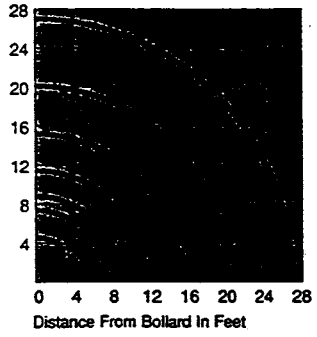
R-Prismatic Refractor



S-Polished Internal Louvers



L-Cast External Louvers



Initial footcandles for 100W HPS 42" bollard (center of optics 36" above grade).

Curve	F.C. Values
A	10.0
B	5.0
C	2.0
D	1.0
E	.50
F	.20
G	.10
H	.05

Lamp Factor Table

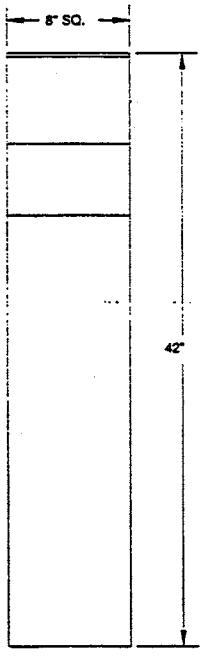
Lamp	Factor
50W HPS	.42
70W HPS	.66
100W HPS	1.00
150W HPS*	1.68
50W MH	.36
70W MH	.53
100W MH	.89
175W MH*	1.47
75W MV	.33
100W MV	.46
100W Inc.	.18

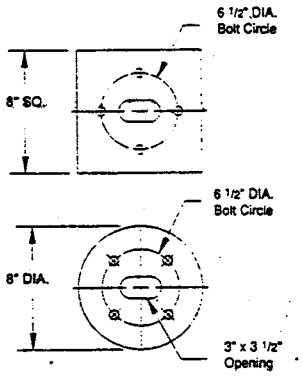
*L style only

For approximate f.c. levels, the factors shown may be multiplied by the 100W HPS value.
Ex: 70W HPS at C curve
= .66 x 2.0 = 1.32 f.c.

Dimensions & Mounting Detail

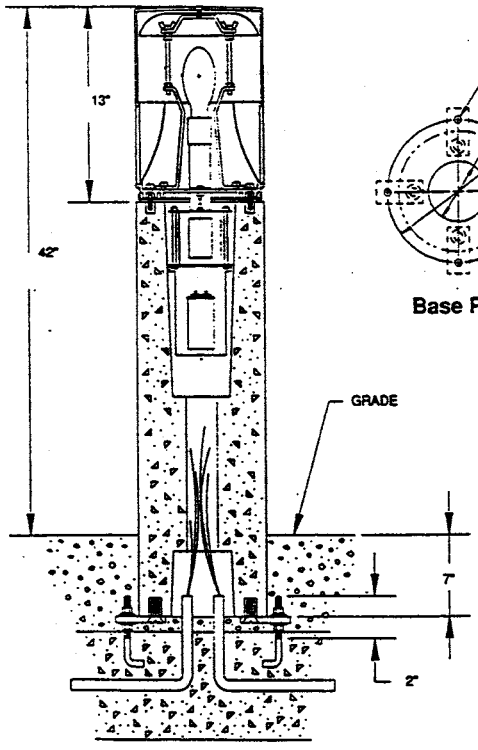
BR8, BS8 SERIES

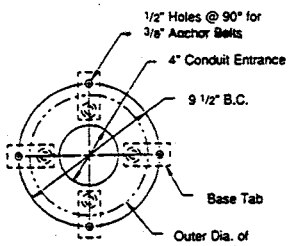




Base Plates

BPC-8 SERIES





Base Plate

Specifications

UPPER HOUSING
Extruded aluminum sides are welded to cast aluminum top and secured with single pin-in-head socket tamper-proof screw. BR8 and BS8 units are painted to match lower housing.

LOWER HOUSING
BR8, BS8 - One-piece seamless, extruded aluminum.

BPC8 - Pre-cast concrete base is reinforced with welded wire mesh and steel rebar and finished with an environmentally safe water based graffiti deterrent sealant. Standard available colors are natural, beige or dark gray concrete.

LENS
BR8, BPC8 - 1/4" one-piece extruded clear virgin acrylic.

BS8 - Four sections of 5/16" mitered clear virgin acrylic are chemically bonded.

OPTICAL SYSTEMS
(C) *Cone* - Upper collecting and lower distributing Alzak® aluminum reflectors provide efficient distribution of light.

(R) *Refractor* - Prismatic borosilicate glass designed to direct light outward and downward.

(S) *Polished Aluminum Louvers* - Angled to provide maximum spacings while shielding the light source.

(L) *Cast Louvers* - Individually cast aluminum blades are fastened in a unitized assembly.

ANCHORAGE
Cast aluminum base is secured to mounting foundation with four (4) 3/8" x 16" anchor bolts on a 6 1/2" bolt circle. Two (2) threaded 3/8" tie rods internally secure housing to anchor base.

Pre-cast concrete base (designed for direct burial) retains four (4) galvanized steel base tabs which are secured and leveled to the mounting foundation with four (4) 3/8" x 9" x 1 1/2" anchor bolts on a 9 1/2" bolt circle.

ELECTRICAL
Standard medium base (mogul base is standard for Cast louvers with 175MH, 175MV, 150HPS lamps) lampholder is glazed porcelain with nickel plated reinforced screwshell and spring loaded contact. Ballast and lampholder are prewired with quick electrical disconnects and mounted on a one-piece assembly secured internally to lower housing with two (2) captive screws.

Each high power factor ballast is the separate component type, capable of providing reliable lamp starting down to -20° F. High Pressure Sodium ballasts operate lamps within ANSI trapezoidal limits. Metal Halide and Mercury Vapor ballasts are medium regulation auto transformers providing ± 10%(MH) and ± 5%(MV) power regulation with a ± 10% variation from rated input voltage. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC, at 150° C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher.

FINISH
Each luminaire receives a fade and abrasion resistant thermally cured and textured electrostatically applied polyester powder finish.

LABELS
All fixtures bear UL wet location (CSA where applicable) and I.B.E.W. labels.

EMCO reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program.

Ordering

Bollard

BS8	– Square
BR8	– Round
BPC8	– Round Natural Concrete Base
BPC8B	– Round Beige Concrete Base
BPC8G	– Round Dark Gray Concrete Base

Wattage / Source

100INC
50HPS
70HPS
100HPS
150HPS (L only)
50MH
70MH
100MH
175MH (L only)
100MV
175MV (L only)

Options

HS-90	– 90° House Side Shield
HS-180	– 180° House Side Shield
PCB	– Button Photocontrol. (Not available on concrete bollards).
30	– 30" High
36	– 36" High

BR8 - L - 100MV - 120 - BLP - PCB

Optics

	Cone Round Reflector	Refractor	Polished Louvers	Cast Louvers
BS8	C	R	S	L
BR8	C	R	S	L
BPC8 Series	C	(Consult Factory)		

Voltage

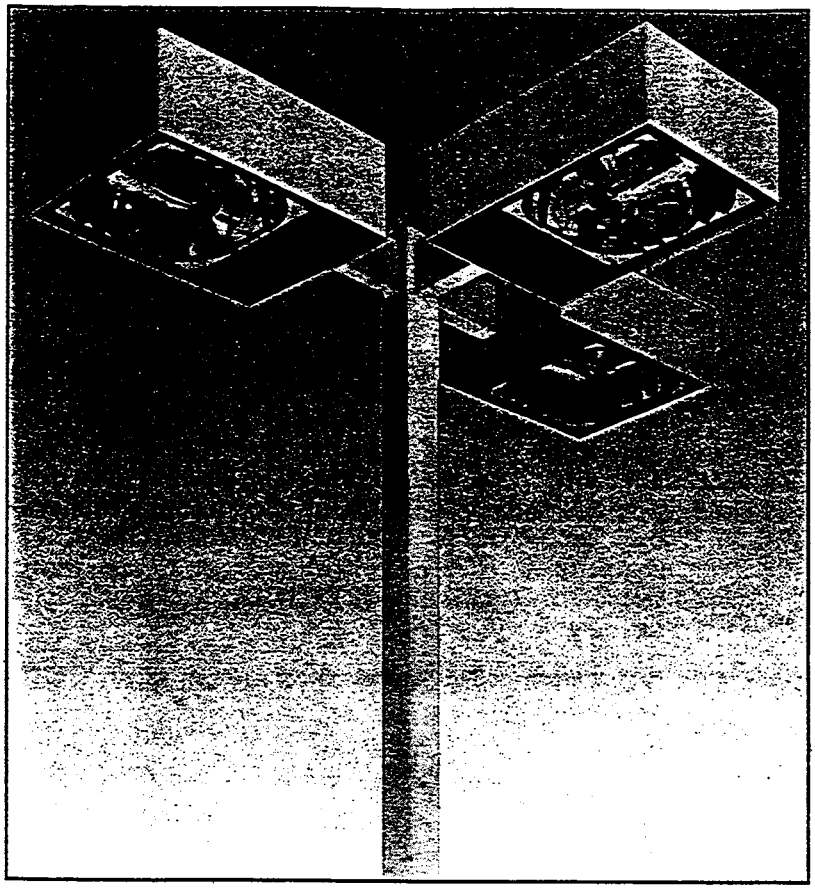
120
277

Finish

BRP	– Bronze Paint
BLP	– Black Paint
NP	– Natural Aluminum Paint
WP	– White Paint
SC	– Special Color (Specify)

Emco
2661 Alvarado St.
San Leandro, CA 94577
800/227-0758
510/357-6900
FAX: 510/357-3088

THOMAS LIGHTING
First Name in Innovation

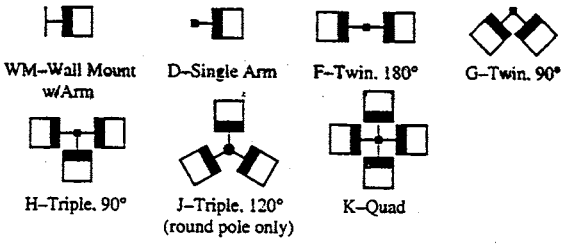


INFINITY II

Rectangular Cutoff Luminai

The Infinity II from EMCO® is a rectangular area luminaire which provides sharp cutoff, even illumination, and wide fixture spacings. Housings are manufactured in rugged extruded or economical formed aluminum. All units are thoroughly sealed and gasketed preventing intrusion of moisture, dust, pollutants, and insects. Segmented Alzak® aluminum facets form a choice of five (5) optical systems providing the desired photometric distribution and illumination levels.

Luminaire Mounting Configurations:



Ordering Information:

Mounting

- WM = Wall Mount w/Arm
- D = Single Arm
- F = Twin, 180°
- G = Twin, 90°
- H = Triple, 90°
- J = Triple, 120°, (round pole only)
- K = Quad

Wattage/Source

Small Housing

50HPS	70MH†	75MV
70HPS	100MH†	100MV
100HPS	175MH	175MV
150HPS	250MH	

Medium Housing

250HPS	400MH	400MV
400HPS		

Large Housing

1000HPS	1000MH	1000MV

†Medium Base Lamp

Voltage

- 120
- 208
- 240
- 277
- 347
- 480

Finish

- BRP = Bronze paint
- BLP = Black paint
- NP = Natural Aluminum paint
- WP = White paint
- BLA = Black Anodized**
- BRA = Bronze Anodized**
- NA = Natural Anodized**
- SC = Special Color paint (Specify)

**Extruded Units Only

PAED - 3H - 250HPS - 120 - BRP - HS

Prefix

- PAE = Extruded
- PAF = Fabricated

Distribution

Horizontal Lamp

- 1H = Type I
- 2H = Type II
- 3H = Type III
- QH = Type V Square
- FB = Front Beam

Options

- PCB* = Button Type Photocontrol Receptacle
- PCT* = Locking Type Photocontrol Receptacle w/Photocontrol
- PCR* = Locking Type Photocontrol Receptacle
- F = Single Fuse In Head (120V & 277V)
- FF = Double Fuse In Head (208V, 240V & 480V)
- TP = Tamper-Resistant Hardware
- LS = Polycarbonate Shield
- HS = Internal House Side Shield (Types II, III and Front Beam only)
- AP = Pole Mount Adj. Knuckle
- AT = Tenon Mount Adj. Knuckle
- MF = Mast Arm Fitter

*Photocontrols not available in 480V (1000W Maximum)

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THOMAS EMCO LIGHTING

EMCO

SPECIFICATIONS

GENERAL DESCRIPTION:

The Infinity II is a rectangular sharp cutoff luminaire for high intensity discharge lamps. Internal components are totally enclosed, rain-tight, dust-tight and corrosion resistant. Arm mounted units attach to pole with no visible hardware or welding. Luminaire is divided into separate optical and ballast compartments.

HOUSING:

Extruded Units: The sides are dieformed from one piece .125" extruded aluminum. The top piece is .09" sheet aluminum, crowned for strength and water runoff. The top is secured to the housing with a continuous weld completely sealing luminaire from the elements.

Fabricated Units: The housing wrapper is one piece dieformed aluminum with an integrally formed bottom hem for increased rigidity. The top cover is .063" sheet aluminum, internally secured to the sides and silicone sealed for weathertight integrity.

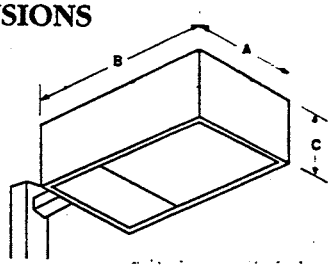
LENS:

A mitered, extruded, anodized aluminum door frame retains the optically clear, heat and impact resistant, tempered flat glass in a sealed manner using hollow-section, high compliance, memory-retentive extruded silicone rubber. A single, flush 1/4 turn captive fastener permits easy access to the luminaire.

OPTICAL SYSTEMS:

The segmented reflector system consists of individually formed semi-specular Alzak® aluminum facets precisely aligned to provide IES Type I, Type II, Type III, Type V Square or Forward Throw lighting distributions. All distributions meet IES roadway cutoff criteria.

DIMENSIONS



Housing Size	Dimensions (In.) A Width	B Depth	C Height	Weight (Lbs.)
Small	13 1/2	20	7	34
Medium	20	26 1/2	9 1/8	58
Large	24	30	11	95

MOUNTING:

Lampholders are glazed porcelain with nickel plated screw shells. Luminaires are designed for mogul base lamps except 70W and 100W metal halide units which feature medium base lampholders. All mogul base lampholders in metal halide units are position oriented. HPS units all feature pulse-rated lampholders.

ELECTRICAL:

Each high power factor ballast is the separate component type capable of providing reliable lamp starting to -20°F. The ballast compartment is completely separated from the lamp compartment. The ballast is mounted on a unitized tray and prewired with quick disconnects. The compartment is accessed with a single quarter turn fastener and ballast assembly is easily removed for servicing.

High pressure sodium ballasts operate lamps within ANSI trapezoidal limits.

Metal halide ballasts are medium regulation autotransformer providing ±10% power regulation with ±10% variation from rated input voltage. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC at 150° or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher.

FINISH:

Extruded units are offered with bronze or black non-fading Duranodic anodized finish applied after fabrication. Powder coat finishes are also available.

Fabricated products receive a fade and abrasion resistant, electrostatically applied, thermally cured polyester powder finish after fabrication.

LABELS:

All luminaires bear UL Wet Location and IBEW labels.

EMCO® reserves the right to change materials or modify the design of its product without notification, as part of the company's continuing product improvement program.

EPA - Effective Projected Area (ft.²)					
D Single Arm	F Twin, 180°	G Twin, 90°	H Triple, 90°	J Triple, 120°	K Quad
1.37	2.74	2.15	3.52	2.89	3.92
2.40	4.80	3.86	5.80	5.28	6.56
3.35	6.70	5.51	8.81	7.47	9.92

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THOMAS EMCO LIGHTING

EMCO POLES

4" STRAIGHT SQUARE ALUMINUM

SPECIFICATIONS

POLE SHAFT: The pole shaft is a one piece, 4" square, seamless 6000 series extruded aluminum tubing and is heat treated to achieve a T6 temper with a guaranteed minimum yield strength of 31 KSI. Pole wall thickness is .100".

BASE TENON ASSEMBLY: The tenon anchor base assembly consists of structural quality A53 carbon steel tubing welded to an A36 structural steel base with a guaranteed minimum yield strength of 36 KSI. The base plate telescopes the pole shaft and is circumferentially welded on both top and bottom. The base is provided with slotted bolt holes to accommodate a ± .5" variation in the rotational flexibility. The entire assembly is hot dipped galvanized. Four (4) mechanically galvanized fasteners secure the aluminum pole shaft to the base tenon assembly.

ANCHOR BOLTS: Anchor bolts are fabricated from a commercial quality hot rolled carbon steel bar that meets or exceeds a minimum guaranteed yield strength of 50,000 psi. Bolts have an "L" bend on one end and threaded on the opposite end a minimum of 4½". Anchor bolts are completely hot dipped galvanized. Four (4) properly sized bolts, each furnished with two (2) regular hex nuts, two (2) flat washers and one (1) lock washer are provided per pole, unless otherwise specified.

BASE COVER: A two piece, fabricated aluminum cover completely conceals the entire base plate and anchorage. The base cover is secured to the base assembly with four (4) stainless steel fasteners.

HANDHOLE: The handhole has a nominal rectangular 2" X 4" inside opening in the pole shaft and tenon assembly. Included is an aluminum cover plate with attachment screws. The handhole is located 18" above the base and 180° clockwise with respect to the luminaire arm when viewed from the top of the pole for one arm. For two arms the handhole is located directly under one arm.

POLE TOP CAP: Each pole assembly is provided with a removable pole top cap. The pole top cap is secured with two (2) stainless steel allen head set screws.

FINISH: Poles are available with bronze, natural or black Aluminum Association Architectural class 1 anodized finish. Electrostatically applied, thermally cured TGIC polyester powder finish is also available.

DESIGN: The standards as charted are designed to withstand dead loads and predicted dynamic loads developed by variable wind speeds with an additional 30% gust factor under the following conditions:

The charted weights include luminaire(s) and/or mounting bracket(s).

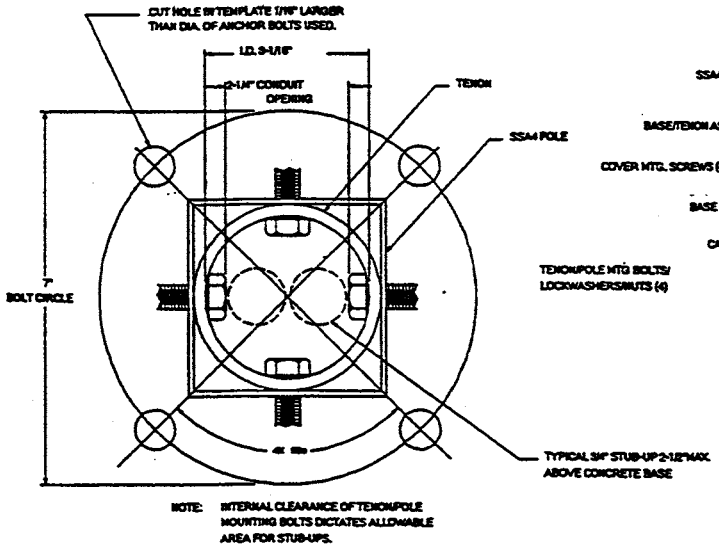
The wind velocities are based on 10 mph increments from 80 mph through 100 mph. Standards to be located in areas of known abnormal conditions may require special consideration. For example: coastal areas, airports and areas of special winds.

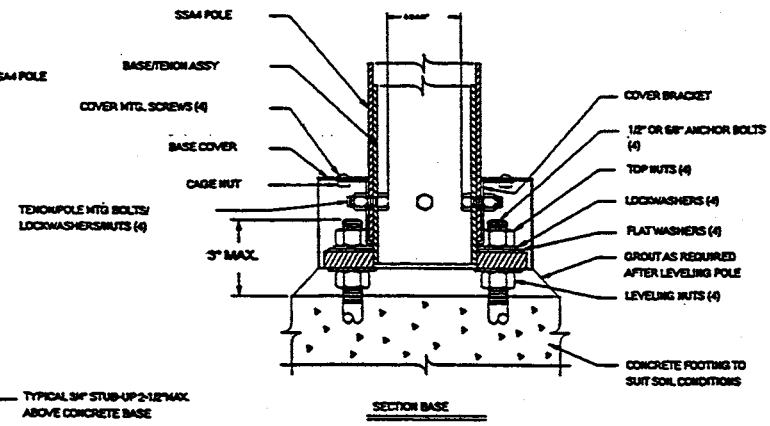
Standards are designed for ground mounted applications. Standards mounted on structures (such as buildings and bridges) may also necessitate special consideration requiring EMCO's recommendation.

Height correction factors and drag coefficients are applied to the entire structure. An appropriate safety factor is maintained based on the minimum yield strength of the material incorporated in the standard.

GENERAL INFORMATION: Mounting height is the vertical distance from the base of the lighting standard to the center of the luminaire arm at the point of luminaire attachment.

Twin arms as charted are oriented at 180° with respect to each other. For applications of two (2) arms at 90° or other multiple arm applications, consult the factory.





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EMCO POLES

4" STRAIGHT SQUARE ALUMINUM

GENERAL DESCRIPTION: The EMCO SSA4 straight aluminum pole consists of a one piece 4" square extruded aluminum lighting standard mounted to a structural quality carbon steel base tenon. This construction offers the corrosion resistance and flexibility of aluminum with the strength and integrity of steel. The poles are finished with either Architectural Class 1 anodizing or electrostatically applied TGIC polyester powder coat. All poles include anchor bolts, full base cover, hand hole, ground lug and top cap.

O R D E R I N G

POLE	HEIGHT	DRILLING	FINISH	OPTIONS
SSA4	8	D1	BRA	PC

POLE	HEIGHT	DRILLING	FINISH	OPTIONS
SSA4	8'	D1: 1 way	BRA: Bronze Anodized	PC: Photocell and Receptacle (in top cap)
	10'	D2: 2 way	BLA: Black Anodized	
	12'	D3: 3 way	NA: Natural Anodized	PCR: Receptacle only
	15'	D4: 4 way	BRP: Bronze Paint	
	18' L,M,H*	T2: 2 3/8" OD Tenon	NP: Natural Aluminum Paint	SR: Single Receptacle
	20' L,M,H*	T3: 3" OD Tenon	BLP: Black Paint	
			WP: White Paint	
			SC: Special Color Paint	

*Refers to steel base tenon size (length and thickness) based on wind load factors - L = light, M = medium, H = heavy

TYPE	POLE	HEIGHT	DRILLING	FINISH	OPTIONS

CATALOG NUMBER	POLE SIZE			MAXIMUM* LUMINAIRE LOADING			ANCHOR BOLT DATA**		
PREFIX-HEIGHT	ACTUAL HEIGHT	BASE TENON HEIGHT (ft.)	WALL THICKNESS (inches)	90 MPH EPA-FT^2	80 MPH EPA-FT^2	70 MPH EPA-FT^2	BOLT CIRCLE (inches)	BOLT SIZE (inches)	MAX PROJ. (inches)
SSA4-8	7' 8"	1.25	.100	14.0	17.3	22.5	7.0	1/2 x 18 x 4	3.0
SSA4-10	9' 8"	1.25	.100	9.6	12.1	15.8	7.0	1/2 x 18 x 4	3.0
SSA4-12	11' 8"	1.25	.100	6.8	8.5	11.5	7.0	1/2 x 18 x 4	3.0
SSA4-15	14' 9"	2	.100	3.4	6.1	8.5	7.0	1/2 x 18 x 4	3.0
SSA4-18L	17' 9"	2	.100	-	2.0	3.3	7.0	1/2 x 18 x 4	3.0
SSA4-18M	17' 9"	4	.100	2.5	3.3	4.9	7.0	5/8 x 18 x 3	3.0
SSA4-18H	17' 9"	6	.100	3.1	3.9	6.0	7.0	5/8 x 18 x 3	3.0
SSA4-20L	19' 9"	2	.100	-	1.5	3.0	7.0	1/2 x 18 x 4	3.0
SSA4-20M	19' 9"	4	.100	1.4	3.0	4.8	7.0	5/8 x 18 x 3	3.0
SSA4-20H	19' 9"	6	.100	1.8	4.7	6.8	7.0	5/8 x 18 x 3	3.0

*EPA ratings calculated using AASHTO Standards.
**Factory supplied template must be used when setting anchor bolts. EMCO Lighting will not honor any claim for incorrect anchorage placement resulting from failure to use factory supplied templates.

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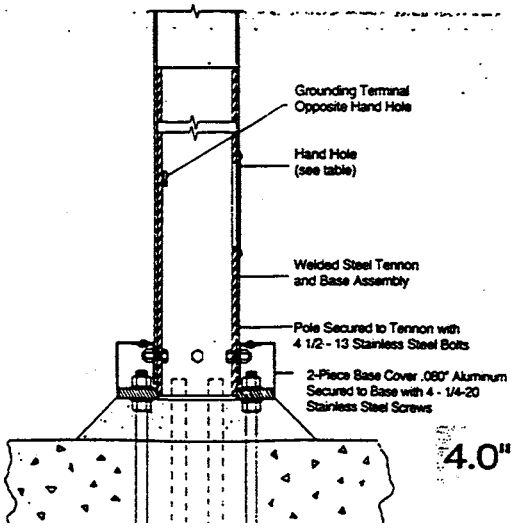
extruded aluminum tubing and heat treated to achieve a T6 temper. The Cruciform pole cross section is square with stepped corner recession.

Base Tenon Assembly: A53 carbon steel tube is welded to A36 structural steel base to form base tenon assembly. Tube and base are both hot dip galvanized. Four (4) stainless steel fasteners secure aluminum pole shaft to base tenon.

Anchorage: Four (4) anchor bolts are fabricated from hot rolled carbon steel bar with a minimum yield strength of 50 K.S.I. Bolts are fully galvanized.

Base Cover: Two-piece heavy wall formed aluminum cover conceals anchor base. Cover is secured with 4 stainless steel tamper resistant fasteners.

Finish: Units are available with bronze, natural, or black Aluminum Association Architectural Class I anodized finish. Electrostatically applied thermal cured polyester powder finish is also offered.



CATALOG NUMBER PREFIX	POLE SIZE HEIGHT (FT.)	BASE TENON HEIGHT (FT.)	MAXIMUM LUMINAIRE LOA 90 MPH EPA-FT²	80 MPH EPA-FT²
CA4-8	8	1.25	14.5	18.8
CA4-10	10	1.25	9.8	13.1
CA4-12	12	1.25	6.8	9.3
CA4-15	15	2	3.9	6.0
CA4-18L	18	2	1.8	3.0
CA4-18M	18	4	3.0	4.4
CA4-18H	18	6	4.4	6.2
CA4-20L	20	2	-	1.8
CA4-20M	20	4	1.3	2.6
CA4-20H	20	6	2.2	4.0
CA4.5-10	10	1.5	22.9	29.7
CA4.5-12	12	1.5	17.5	22.9
CA4.5-15	15	1.5	9.6	12.8
CA4.5-18	18	1.5	6.2	8.8
CA4.5-20	20	1.5	4.5	6.7
CA5-12	12	2.5	18.6	24.3
CA5-15	15	2.5	11.0	16.1
CA5-18	18	2.5	9.3	14.2
CA5-20	20	2.5	4.3	7.0
CA5-25L	25	2.5	1.2	3.4
CA5-25M	25	4	2.1	4.2
CA5-25H	25	7	4.0	6.3
CA5-28L	28	2.5	-	-
CA5-28M	28	4	-	2.0
CA5-28H	28	7	2.2	4.1
CA6-15	15	3	32.4	42.1
CA6-18	18	3	18.6	24.6
CA6-20	20	3	11.4	16.7
CA6-25	25	3	6.2	10.2
CA6-28	28	3	4.0	7.4
CA6-30L	30	3	2.2	5.4
CA6-30M	30	6	4.6	8.0
CA6-30H	30	9	7.0	11.1
CA6-33L	33	3	-	3.0
CA6-33M	33	6	2.7	5.3
CA6-33H	33	9	5.0	8.1

4.0" 4.5" 5.0" 6.0"

STRAIGHT SQUARE AL

CATALOG NUMBER PREFIX	POLE SIZE HEIGHT (FT.)	BASE TENON HEIGHT (FT.)	MAXIMUM LUMINAIRE LO 90 MPH EPA-FT²	80 MPH EPA-FT²
SSA4-8	8	1.25	17.3	22.5
SSA4-10	10	1.25	12.1	15.8
SSA4-12	12	1.25	8.5	11.5
SSA4-15	15	2	6.1	8.5
SSA4-18L	18	2	2.0	3.3
SSA4-18H	18	6	3.9	6.0

SPECIFICATIONS

HOUSING: A one-piece die cast aluminum housing mounts directly to a pole or wall without the need for a support arm. The low profile rounded form generates wind loading requirements of 1.2 EPA.

LENS ASSEMBLY: A single-piece die cast aluminum lens frame hinges down from the housing and is secured by a stainless steel lanyard and hinge pin.

An optically clear, heat and impact resistant tempered flat glass lens is mechanically secured with eight retainers. The electrical and optical chambers are thoroughly sealed with a one-piece memory retentive hollow core EPDM gasket to prevent intrusion by rain, dust and insects.

OPTICAL SYSTEMS: The segmented optical systems are manufactured from homogenous sheet aluminum which has been electrochemically brightened, anodized and sealed. The multifaceted arc image duplicating systems are designed to produce IES Types 1 (1), 2 (2XL), 3 (3XL), 4 (4XL), and 5 (Q). With the 2XL, 3XL and 4XL luminaires, the reflector facets form a conical fan around the arc tube with each facet positioned to precisely tangent to the top of the arc tube.

A mogul base lampholder is glazed porcelain with a nickel plated screw shell. Position-oriented sockets are supplied standard to accept super metal halide lamps. All units feature lamp stablizers except 150 HPS.

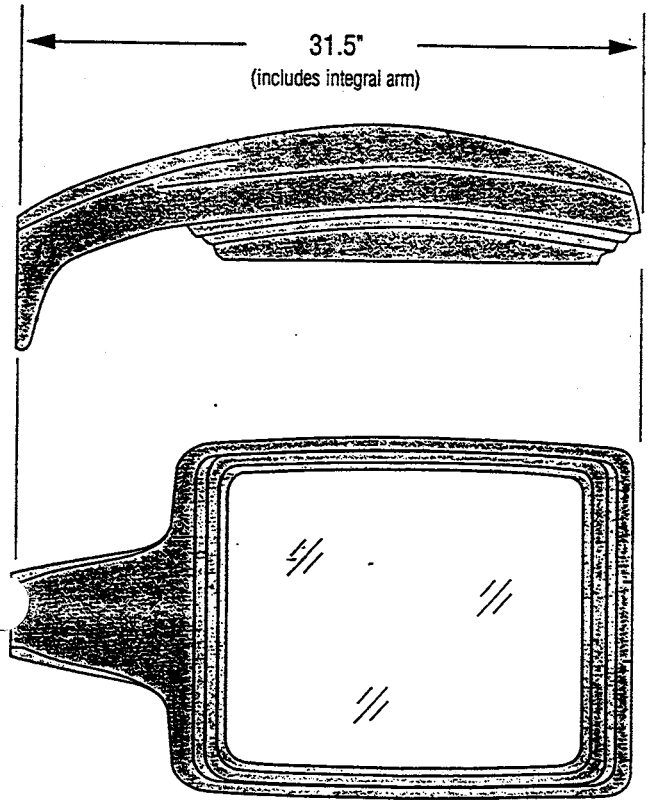
ELECTRICAL: All electrical components are UL recognized, factory tested, and mounted on a unitized plate with quick electrical disconnects. Each high power factor ballast is the separate component type capable of providing reliable lamp starting down to -20°F.

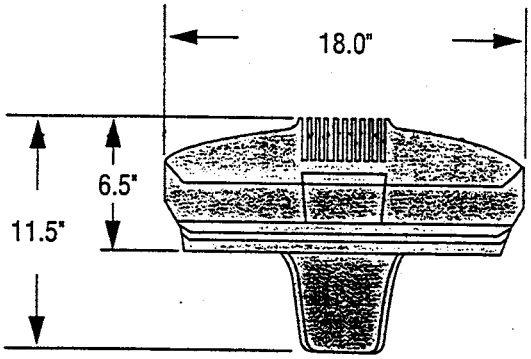
FINISH: Luminaires are finished with a fade and abrasion resistant, electrostatically applied, thermally cured TGIC powder coat. Units are thoroughly cleaned and provided with a patented chromate acid pretreatment.

LABELS: All fixtures bear UL and CSA (where applicable) wet location and I.B.E.W. labels.

Gardco reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program. Design and optical patents are pending.

DIMENSIONS





E.P.A. (SQ.FT.)

1-way – 1.2
2-way – 2.4
4-way – 3.2

ORDERING

G18	1	2XL	250HPS	208	BRP	PC
PREFIX	CONFIGURATION	DISTRIBUTION	WATTAGE	VOLTAGE	FINISH	OPTIONS
G18	1	1	150 HPS	120	BRP	HF
	2	2XL	250 HPS	208	BLP	LF
	3	3XL	400 HPS	240	WP	PC
	4	4XL	600 HPS	277	NP	PCR
	W	Q	100 MH	347	SC	POLY
	WS		150 MH	480		HS
			175 MH			QS
			250 MH			RPA1**
			400 MH			RPA2**
			All lamps are mogul base.			PTF

CONFIGURATION

1 - Single Fixture Assembly
2 - Twin @ 90° or 180° - Indicate
3 - Triple @ 90°
4 - Quad
W - Wall Mount, Recessed J - Box
WS - Wall Mount, Surface Conduit
(splice compartment within luminaire)

DISTRIBUTION

1 - Type 1 Horizontal Lamp*
2XL - Type 2 Horizontal Lamp
3XL - Type 3 Horizontal Lamp
4XL - Type 4 Horizontal Lamp
Q - Type 5 Horizontal Lamp*
* Not available with 600W.

FINISH

BRP - Bronze
BLP - Black
WP - White
NP - Natural
SC - Special Color

OPTIONS

HF - In-Head Fusing
LF - In-Pole Fusing
PC - Receptacle and Photo Control
PCR - Photo Control (Receptacle Only)
POLY - Polycarbonate Sag Lens (Not Available in 400W or Higher)
HS - Houseside Shield
QS - Quartz Restrike

**NOTE: RPA1 is required for 3" o.d. poles or tapered round poles where top o.d. is less than 4". RPA2 is used for 4" to 5" round poles.

CONFIGURATIONS

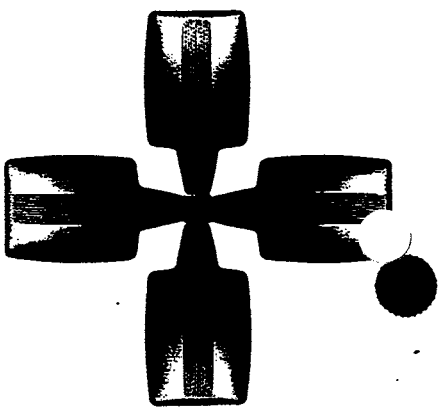
Gullwing is designed around square poles, which are inherently more economical than round. In single, twin and four-way configurations the luminaire-to-pole transition is smooth and natural.

For wall-mounted applications, the the design allows mounting to both a j-box and surface conduit. For surface conduit, the splice is made inside the luminaire. Splice box volume is 19.8 cubic inches.

Gullwing is UL approved for through wiring.

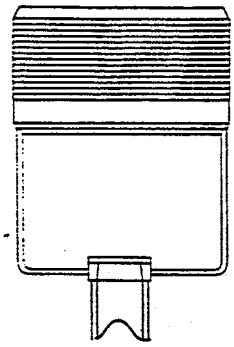
1

2



4

FORM 10 S EPS/EPG Yoke Mount



The Gardco Yoke Mounted Form 10 S products are square Prismatic Top (EPS) or Translucent Top (EPG) sharp cutoff luminaires for high intensity discharge lamps up to 250W. Optical systems feature highly specular precision segmented reflector facets which provide wide spacings, uniform illumination and sharp cutoff. Reflectors available in (4) photometric distributions and are rotatable in 90° increments. Prismatic unit features a subtle crystalline sparkle on vertical surfaces of luminaire while translucent product provides a soft glow.

Ordering

Example:

EPS16	1	150HPS	120	BLP	LF

PREFIX	REFLECTOR	WATTAGE	VOLTAGE	FINISH	OPTIONS
EPS16 Sparkle top	1 (Horizontal Lamp)	See Below	120	BLP	LF
EPS16 Glow top	3 (Horizontal Lamp)		208	BRP	
	Q (Horizontal Lamp)		240	NP	
	FM (Horizontal Lamp)		277	WP	
				SC	

WATTAGE

70 HPS
100 HPS
150 HPS
50 MH[1]
70 MH[1]
100 MH[1]
175 MH
250 MH[2]
100 MV
175 MV
250 MV[2]

FINISH

BLP : Black Paint
BRP : Bronze Paint
NP : Natural Aluminum Paint
WP : White Paint
SC : Special Color (specify)

OPTIONS

LF : Fuse

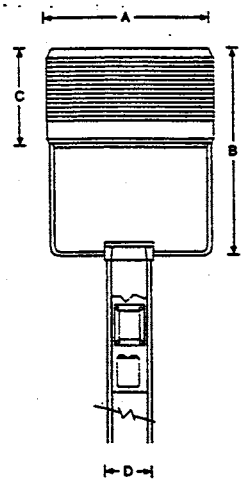
NOTES

1. 50W, 70W, 100W MH Use Medium Base Lamp
2. 250 Watt Units Available in 120 or 277 Volt Only

Gardco Lighting

Dimensional Drawings

EPS/EPG Style	A	B	C	D
	16 5/8"	19"	8 1/2"	4 1/2"
	422mm	483mm	216mm	114mm



Note: Ballast is located inside of pole.